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# THE AGRICULTURAL STUDENT

OHIO STATE UNIVERSITY, COLUMBUS, OHIO



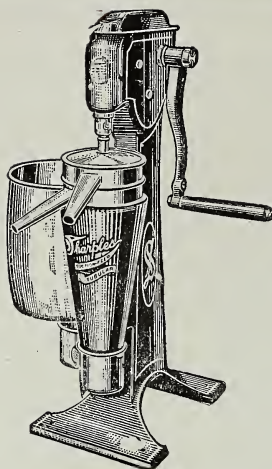
JUNE, 1920

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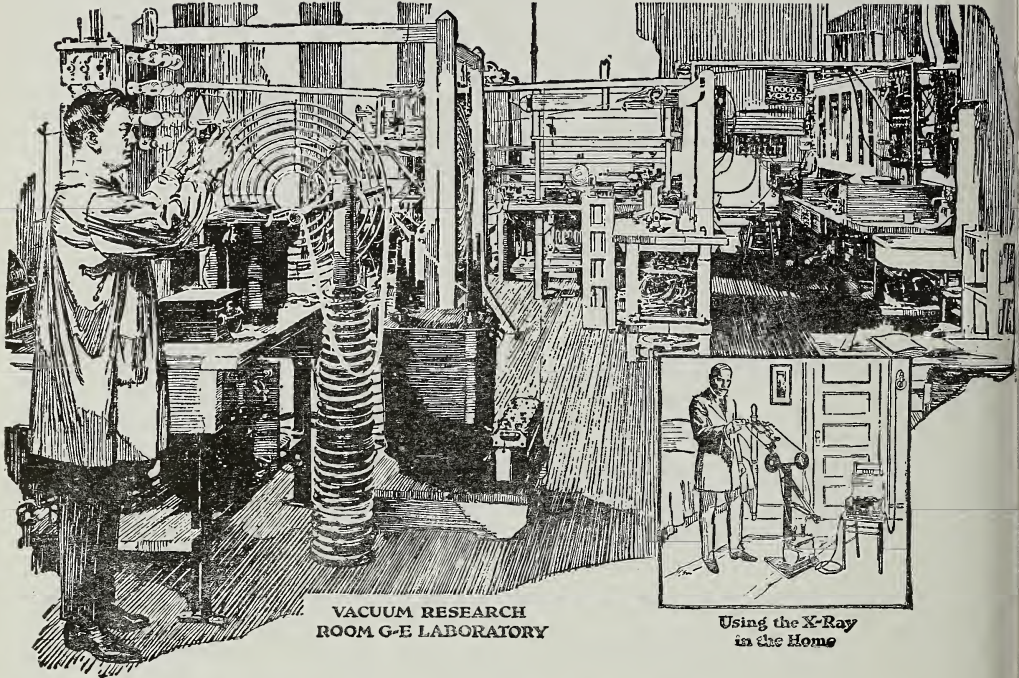
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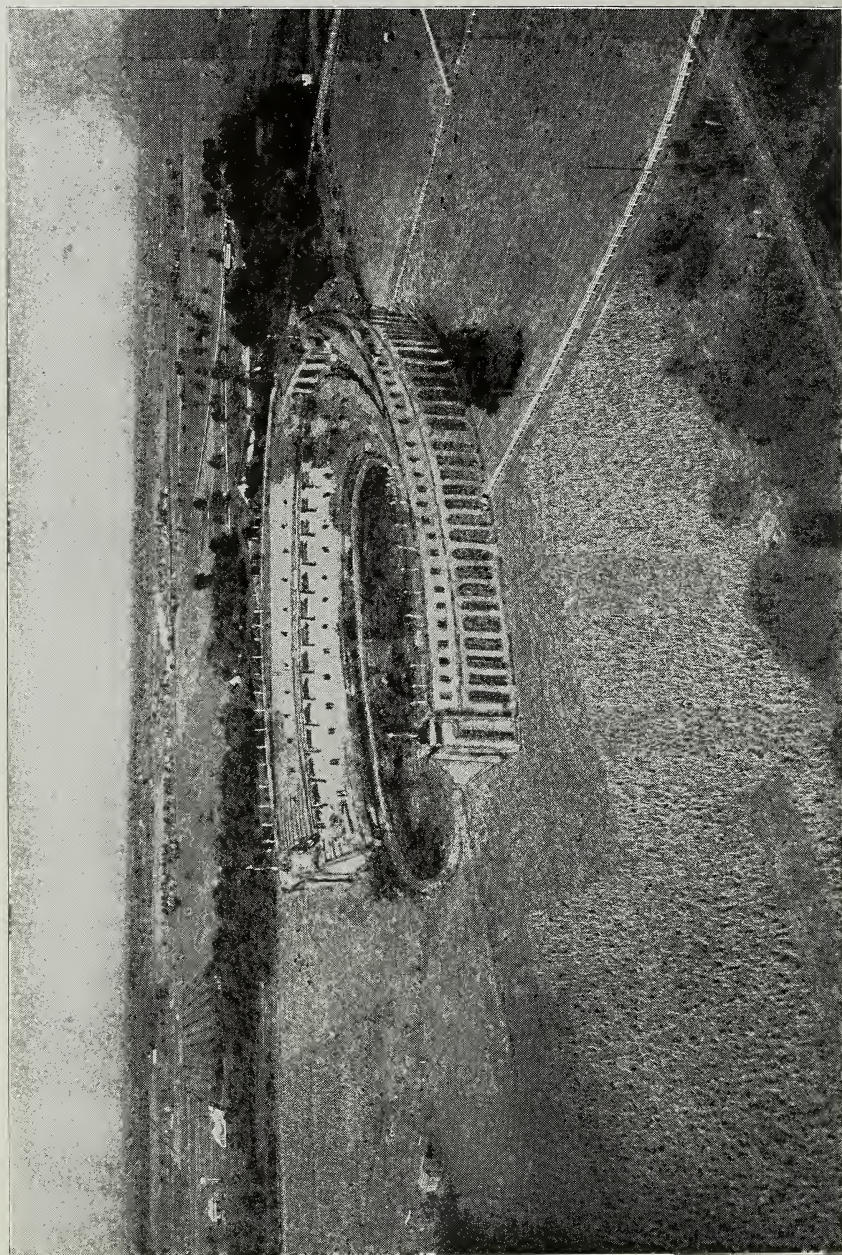
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# The Agricultural Student

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No

## TAXATION IN OHIO

By C. A. DYER.

*(Mr. Dyer is Taxation Editor of the Ohio State Grange Monthly. In this article he reviews the taxation situation, points out the defects of our present laws and offers us his opinion.)*

SINCE 1851 the "uniform rule" has been in the constitution of Ohio. During the first years of its operation real estate paid 75% of the taxes of the state. This was probably something like justice, for in those early years Ohio was a great farming community.

Today we find real estate still paying this same 75% of all the taxes of Ohio. This is a rank injustice to the home-dwellers and farm-owners of the state, for Ohio is no longer merely an agricultural state. It is one of the leaders in manufacture and commerce, and its visible and tangible personal property has increased by leaps and bounds, until today this sort of wealth vastly exceeds the real estate of the state.

A conservative estimate of the value of the real estate of Ohio will place it at less than one-half of the wealth of the state. Since this is so, real estate should pay less than one-half of the tax of Ohio, instead of three-fourths.

During the last campaign the classificationists claimed that fifteen billions of dollars of intangibles were not taxed in Ohio. If this is so, estimating real estate at nine billions and other property at three billions, we have a total wealth in Ohio of twenty-seven billions. But this is probably too high an estimate. It is safe to put the taxable wealth of the state at twenty-two billions.

The average tax rate today is about \$1.50. If all the property in the state

were listed for taxation, the rate would be about \$0.75. So taxation would be a minor problem if all men were honest and all spending officials were economical.

Why is the "uniform rule" not in operation in Ohio? In 1851 Ohio was an agricultural state. There were no great holdings of personal property and intangibles. But soon industrial development began, and intangible property was created. Naturally it sought to evade taxation. Taxing officials here and there attempted to place it upon the tax duplicate. The courts were appealed to, and gave their protection to the tax-dodgers. Finally these court decisions were brought together and simplified and enacted into laws. As a result of this, the statutes of Ohio provide safe hiding places for intangible property in the vaults of the financial institutions of the state. These are not subject to the examination of the taxing officials of the state.

Besides this, the holders of intangibles have been educating the public mind to tax evasion, until today, a man, perfectly honest and upright in all other transactions, feels that it is perfectly right to perjure himself to evade taxation, and hides behind the excuse that all his associates do the same thing.

In truth, the whole credit structure of the state is built up on the theory that intangible property will not be taxed, and securities are uniformly

owned, bought and sold upon that theory.

By reason of this evasion of taxes, a crisis came to Ohio in 1910. Real estate was not appraised at its full value, personal property was hidden from the assessor, the average tax rate in the state was over 3%, and the taxing districts had begun to pile up their accumulation of debt.

The Smith law, the most vicious piece of tax legislation ever written in Ohio, was enacted by the legislature as the remedy. It was drawn up by men who wanted "to make a market for money," and the "market" was to be made by the tax limitation of 1%, which was too small to finance the cities and schools. Thus, they were forced to issue bonds, and the "market for money" was made.

Under the Smith law real estate was appraised at its true value in money, and in 1911 when the taxes were paid under it, it was found that the low rate of 1% had not brought out intangible property as promised, but that real estate had paid a greater portion of the tax than ever before, while intangibles had paid less.

Thus was the result desired by the authors of the law attained. They had purposely left out of the law any "teeth" by which intangibles would be forced on the tax duplicates, fooling the people by telling them that intangibles would be "coaxed" on by the low rate. But the great evil of the Smith law was its lack of a debt limitation.

This lack of a debt limit, plus extravagance, has created a debt of \$500,000,000 in Ohio, with a yearly interest charge of \$30,000,000. The tax rate is again mounting, and we are in much worse condition than we were in 1910.

The last legislature appointed a bipartisan taxation committee to find a

way out of our difficulties. This committee was appointed primarily to classify property in Ohio in case classification was adopted, and was not in sympathy with the "uniform rule."

The Grange led in the fight against classification and for a better tax system last year. It was ably supported by the Farm Bureau and other organizations. The Home Protective League was formed. This league adopted a taxation platform, and asked the legislature for specific things. The taxation committee recommended these specific things to the legislature.

The first was a budget system. The taxation committee says, "In our judgment the whole question of a general and efficient budgetary system is of such paramount importance that we recommend it in all earnestness to the attention of the General Assembly."

The second was a debt limitation. The committee says, "We are recommending the submission of a constitutional amendment for the control of debt issue. We have reached the conclusion that it is of less significance that the tax rates be rigidly limited than it is that public debt be restricted."

The third was a graduated auto tax. The committee recommended such a tax, and the law was enacted.

The fourth was an income tax. The taxation committee says, "In order for even the degree of relief which we have suggested to be realized, it will be necessary to enact the income tax in time to apply to incomes arising in 1919—that is before the close of the calendar year 1919."

Except in the case of the auto tax, the legislature ignored the recommendations of its own committee, and the demands of the Grange, the Farm Bu-

reau, the Home Protective League, and many city organizations.

But the legislature did some other things.

It gave taxing districts power to bond their debts and pay interest upon them.

It gave us the Gardner law, which will allow the taxing districts to place their sinking fund levies outside the tax limitations, and thus have that much more tax money for their officials to spend.

It refused to place any inquisitorial features in the tax laws, so that intangible property would be compelled to pay tax.

It did something more. The committee tells us what in these words: "With the provisions so recently enacted, we feel that the administrative machinery for a proper listing of real property is fairly complete and in good working order, and, that, in so far as the application of the uniform rule to real property is concerned, we have already provided ample administrative features for the proper enforcement of this principle."

So, again we are going to have the tragedy of 1911 enacted. The state tax commission has the power and will order a re-appraisement of the real estate of Ohio after the August primaries. The inflated process of real estate must go on the tax duplicate, so that in 1921 the homes and farms of Ohio will be forced to pay 90% of the tax of the state instead of 75% as at present, unless intangible property voluntarily comes to the rescue.

What can the home-owners and farm-owners of the state do?

They can do nothing at present, but much in the future, but, first they must agree among themselves and decide what is to be done. A policy of construction

must be framed and carried out. It will be necessary to amend the constitution. Shall we insist on the retention of the uniform rule? Tax experts say that it is unjust and unworkable. Ohio has made a failure of it for seventy years. It is impossible to tax intangible property directly in any state, even at the lowest rates, as the experience of Kentucky with her drastic classification law has shown. It would be an injustice to superimpose an income tax upon the already over-burdened owner of real estate. It penalizes home-owning. It taxes thrift and saving. It promotes dishonesty and crime. It frees the spendthrift from paying for the blessings of the government he enjoys. These are the excuses that Ohio legislature has always hidden behind as a reason for not giving us just tax laws. So, for sixty-nine years we have had the "uniform rule" in our constitution, but we have never had it in our laws.

It is intolerable that the home-owners of the state should own less than one-half of the wealth of the state and yet pay three-fourths of its taxes, and now be threatened with a reappraisement that will force them to pay nine-tenths of the tax.

We will have to turn our thoughts and activities in a new direction. Heretofore we have fought to put the uniform rule into effect, and have tried to make the other fellow pay his taxes. This is impossible as long as present legislative conditions exist in the state.

With the tax-dodgers on one side and the single-taxers on the other, the only safety lies in amending the constitution in two ways. The first, to provide a tax limit for real estate. The second, to provide a debt limit for each taxing district, beyond which the district can not go.

With these two provisions in the con-



stitution, the legislature would be forced to raise revenue from other sources than real estate, and the home-owner need not worry about what particular rule was used. These amendments may sound like "locking the stable after the horse is stolen," but, if we can adopt them in time, we may be able to keep the thief from stealing the stable.

Our present duty is to educate the people of the state along the line of taxation and to elect the right kind of a legislature in 1920.

This legislature must be composed of men, real men, honest, business men.

Men, divorced from the "invisible government" which has controlled Ohio for so many years.

Men, more American than partisan.

Men, who will cut the wires to political headquarters.

Men, who will kick the high-priced lobbyists down the stairs at the capitol.

Men, who will give the homes and farms of Ohio a square deal.

Men, who will force every man, with ability, to pay his share of tax to the state, the blessings of whose government he enjoys.

## MOWING THE SOUTH MEADOW

By SCOTT W. FREED, '23.

*(This was the story that won third prize in the Student short story contest.)*

I WAS awakened at an early hour by the rapid click-click-click of the mower as it turned into the meadow gate. They had spoken last night of beginning on the south meadow, but I had not supposed that anyone would think of starting so soon—above all, the hired man. I heard the gate close, and a moment later Sam's shrill "Giddup!" and soon the clatter of the machine died away as it moved toward the opposite end of the field. I was asleep again in a moment, only to be re-awakened a little later by the returning clatter of the cutter as it finished its work of the first round. It was useless to try to sleep, so I arose and looked out of the south window. Sam was turning the corner in the opposite direction from that which he had taken the first time around. The cutter on the mower was a six-footer and the hay was heavy, making it necessary for Sam to use a heavy team. Under his guidance the team worked perfectly. While turning the corner Sam raised the cutter-bar by placing his foot on a small lever, and

after a few clicks, dropped it again, and the whirr of the knife in the cutter-bar became steady. All this he managed with the greatest ease.

Above the rattle I could hear Sam's "double-tongue" whistle which ceased only long enough for him to shout his habitual "Giddup!" to his team.

By the time I had gotten into the field they had just passed on the third round. Two beautiful, even swaths lay with stocks end to end, and another took its place beside them as the restless cutter tore through the tall timothy. It would seem as though the driver must be following a measured line across the field, so straight were the severed swaths. But Sam seemed to be making no special effort. In his left hand he held the reins that guided the team, and in his right, he swung a long lash, not so much because he need it, but because he would have felt lost without it.

The field was large and it took some time to make one round trip with the mower. For several minutes I stood in admiration. The steady movement of



the horses; the whirring cutter; the long lash flinging itself through the air; Sam, tossed about in the big metal seat—all these seemed like parts of a perfect machine, transforming the meadow from a soft, swaying green into a field of bare, brown stubble.

The sun came out even hotter than it had been yesterday. From time to time Sam would get down from his seat on the machine after throwing it out of gear, and tear out the wet grass which had wedged itself between the knife and the cutter-bar. Then he would walk to the horses' heads, give them each a

and drove to town for some machine repairs. It was nearly noon when I returned, and Sam was unhitching the horses from the mower. One by one they filed across the field, and down to the old watering trough. Then they walked hurriedly toward the stables where their feeds of hay and grain awaited them. Sam covered the machine with a large canvas and stepped back to view his morning's work. He moved his big broad-brimmed hat, revealing his shock of bright red hair. Some people called him "Red," but I had learned to know that he did not like it,



MOWING THE SOUTH MEADOW

handful of grass, lift their collars from their necks, rub their shoulders with his hand and smooth out their manes. Sometimes he would get down only to "swat" some greedy horsefly with his big rough hand, or to pick up some poor, unfortunate young rabbit which had failed to hide far enough in the standing timothy to escape the hidden knife of the mower. These he always killed to relieve their suffering. Sometimes he would stop and drive them farther in, when he happened to spy them in the waving grass before him.

At my uncle's request I hitched up

although he never said so, and I always called him just Sam. With his big, red handkerchief he mopped the sweat from his face. He replaced his hat, picked up his lash whip and came toward the barn. When I asked him if he would finish in the afternoon he replied:

"No; the sky looks like we might have rain in a couple of days, and I guess it'll take us that long to get in what's down already."

If Sam said it would rain, it would; for Sam knew.

## SADDLE AND SIRLOIN CLUB AT O. S. U.

By W. S. MOZIER, '20.

IN February, 1911, nine years ago, the students of the Agricultural College who were especially interested in animal husbandry, met with the Faculty of that department "for the purpose of effecting an organization among those interested in animal husbandry." At this meeting Professor Plumb suggested the name, Saddle and Sirloin Club. It was the first collegiate club organized under the name. Today there are several college animal husbandry clubs that have organized under this name and new ones are being added to the list each semester.

These clubs have become so numerous that some of our sister colleges have started a movement on foot for the organization of all the local clubs of the various animal husbandry departments into a national organization. This move would greatly strengthen the clubs and tend toward a unity of efforts and toward better understanding between students of the colleges so represented. By being nationally organized a greater effect could be produced, nationally, for the development of better livestock.

As most of the present day noted breeders and those of the future, will belong to this club, a directory of all such men could be more easily obtained. It would bind closer together all those interested in animal husbandry and produce a friendly feeling between all members, similar to that that exists between men of the different chapters of the same fraternal organization. In order to obtain this the premium on membership would have to be kept or possibly raised. All men who have passed at least one semester's work in animal husbandry and are interested in its promotion, can become members after they

have submitted an article upon some animal husbandry topic, this in turn being approved by the membership committee which consists of three students and two professors of that department. This is the standard now used by our club.

Partly recovered from last year's shock, the Saddle and Sirloin Club started off last fall with a somewhat depleted rank. During the first semester the only activity undertaken by the club was the "Little International." This was a display of the fine stock owned by the University. Some of those were the same animals prepared for showing at the International Livestock Exposition at Chicago. Although only sheep and hogs were sent to Chicago, the University's cattle and horses were displayed at this time also.

For this semester quite a large program was prepared but due to the time required to put on each event some of them have been cut out. They were thought to be of enough importance, however, to be put on the program for next semester.

An art display consisting of all the pictures and photographs that could be obtained was suggested by Professor Plumb. A large number of paintings of animals have been taken but never put on display. This would not only be interesting but instructive as well.

This semester the main activities are featured, one the putting on of the Sheep Shearing Contest and the other cooperating with the Columbus Riding Club in putting across a horse show.

The Sheep Shearing Contest was held at the judging pavilion on April 28th. There were five events, three being open to students and two to professionals

(Continued on page 444)



## THIRTY-SEVEN YEARS OLD AND GOING STRONG

By VANCE CLEVER, '21.

Townshend Agricultural Society simply couldn't lay down on its record of being the oldest literary organization on the campus after 37 years of continuous service and it rallied in fine shape from the effects of the war and coal shortage. At the last meeting in the spring of 1919, O. E. Baker, who had just returned from naval service, was elected president and plans were laid for entering this school year with a run-

position of milk and the manufacture of oleomargine. And do you remember that weiner roast we had planned on three separate occasions last spring, and how it rained every blamed time? Well at last we bribed the weather man into letting us hold it, and it was a great success. Another social event on our calendar was a dance held at Rader's Oak street academy before Thanksgiving recess. The success of these two



HOME OF TOWNSHEND AGRICULTURAL SOCIETY

ning start. Dean Vivian and Prof. Ramsower came to the first meeting to speak to the crowd and help dispose of apples and doughnuts, and when the meeting ended Townshend Ag had a membership of one hundred eighty.

The attendance has been such that a number of times our room 200 would not seat all, but many were forced to drape themselves over the lecture desk from which we were wont to hear "Bobby" Stoltz hold forth on the com-

events was largely due to the untiring efforts of the chairmen of the committees in charge, H. L. Gartner and Melby W. Brady:

Too much credit for the success of the semester's work cannot be given to the president, who was never too busy to boost Townshend Ag, John F. Dowler who saw to arranging good programs, and Arthur H. Neu, who as official bill poster, gave us efficient advertising.

(Continued on page 444)

## LIVESTOCK JUDGING CONTESTS AMONG SMITH-HUGHES SCHOOLS

By W. W. MONTGOMERY.

CONSIDERABLE work has been done in the last two years, among the various Smith-Hughes schools along the line of livestock judging contests.

Probably the oldest and most extensive proposition that has been carried out along this line, has been among some of the Smith-Hughes schools of northwestern Ohio, including such schools as Fayette, Grand Rapids and Delpha. Here a permanent association was formed, known as the Inter-scholastic High School Judging Association of Northwestern Ohio.

Another association was formed early this spring among the following Smith-Hughes schools, Edison, Martel, Pleasant Township, Ashley and Mt. Zion. Representing four different counties and known as the North Central Ohio Grain and Livestock Judging Contest Association. It being the object of this association to hold an annual judging contest among these schools, judging both the farm grains and livestock.

A meeting was called at one of the County Agent's offices for the teachers in vocational agriculture, in order to draw up the constitution and by-laws necessary for the association. After the organization of the association had been formulated, three of the teachers spent one day going about the county from farm to farm, and selecting the farms where judging might be done. It was usually impossible to get more than one kind of livestock at any one farm, so each farm selected was one representing a particular and especially good kind.

It would be almost impossible to find in the average community one farm which contained on it, several different

kinds of representative livestock. There are some advantages in not doing all the judging in one place, for by attending different farms the boys are given an opportunity to see many more farms, farm homes, buildings and barns and to become acquainted with numerous breeders, and all these things have a great educational value for the boys.

A contest was held by the North Central Association on April 23, on farms in Marion county. Five different kinds of livestock were judged, including horses, beef cattle, dairy cattle, sheep and hogs. Only one ring of each kind of livestock was judged. It might seem that it would not require a full day's time to judge five rings with three or four animals each, but when some schools have twenty to twenty-five miles to drive, then drive from place to place to judge, much time is taken up in this manner. The high school boy must have considerable time to do both his judging and reason giving. Accommodations are not always the best on every farm for judging work and here some time is lost. A little time should be given the boys to look over the buildings, especially if they are modern and up-to-date.

Then too, it might be advisable to visit some one farm, just to see an individual animal of particular outstanding merit.

This contest was a great success even though the weather was not the most favorable. The boys gained many new points on judging, saw new places and things of interest, besides waxing more enthusiastic in the study of Animal Husbandry. Many of them got up so much

(Continued on page 448)



## METHODS OF SECURING AGRICULTURAL DOCUMENTS

By CHARLES WELLS REEDER, '06, '09.

IN these days of high prices and scarcity of goods, it is unique that government publications are still available for free distribution or for purchase at small sums. The printing presses of the government are kept busy turning out a great volume of documents, which numbered for the year 1918-1919, 16,288 separate titles. Many of these publications are only a single page while others are substantial books of five and six hundred pages. The whole product, however, contains information that is useful as an historical record of government activities and is one of the most potent means for popular education and the wide diffusion of knowledge. The cost of this stupendous printing plant and its product amounted to \$13,709,617.09 for the last fiscal year.

The department of agriculture is one of the most prolific government agencies in getting out publications. Last year 1,241 new documents and reprints were issued. The total number of copies distributed was 62,218,829. The publications of this department are issued in several series, as follows: Department Bulletins, Farmers' Bulletins, Department Circulars, Circulars of the Secretary's Office, and the Year-book. In addition several periodicals are issued regularly: Service and Regulatory Announcements, Weekly News Letter, Monthly Drop Reporter, Journal of Agricultural Research, Monthly Weather Review, Market Reporter, and the Experiment Station Record.

The policy of the department of agriculture in distributing these publications is very liberal. In general the first group mentioned contains the

pamphlets that are free as long as the supply lasts. The second group contains the weekly and monthly periodicals for several of which a subscription price is fixed.

For handling the documents of the department, there has been created a division of publications. This division issues on the last day of each month the "Monthly List of Publications," which contains the titles and other data on the documents of that period. This list will be mailed regularly to any person who desires to apply for it. Upon its receipt each month, it takes only a few minutes to look over the list of publications and check those desired for personal use. The list is then returned to the division and in a few days the desired bulletins are received by mail.

The division of publications has also issued a catalog of "Publications Available for Distribution," revised to July 1, 1919, 234 pages. This list contains a record of each publication ever issued by the department, which is still in stock and available for distribution. To a person developing an agricultural library or making a collection of literature on agricultural topics, this catalog is indispensable. It will be sent free upon application to the chief of the division.

Likewise, the division issues at frequent intervals a leaflet giving the titles and numbers of Farmers' Bulletins still available for distribution. The latest edition is January 1, 1920, and records five hundred titles still in stock.

What has been described so far relates to methods of securing only occasional publications which are of interest. If an individual desires to receive

all the Farmers' Bulletins or other series regularly, he may make application to have his name placed upon a regular mailing list. Nearly 500,000 persons are now on such lists.

Not only does the Department of Agriculture distribute its publications free as long as the supply lasts, but also members of Congress have a quota for personal use. For instance, 94 per cent of the entire edition of the Year-book is distributed by them, and last year they mailed to constituents 5,490,652 copies of the Farmers' Bulletins. It frequently happens that the agricultural department will be unable to supply a publication requested, and the writer of the letter will be notified of the exhaustion of the stock. Be not disheartened, try the congressman from your district! He may still have copies in his quota, and if he does not have, he is very likely to secure the document from some of his friends who have.

Such generous free distribution of government publications is productive of waste, so many recommendations have been made for limited editions and a sales method of distribution. Such a system is in existence, and is conducted by the superintendent of documents. The free mailing lists and free distribution are gradually being restricted while the policy of selling is yearly becoming more fixed. Last year, viewing the entire distribution, 54,206.142 documents were sent out by the superintendent on departmental orders, free of charge, while 4,782,657 were sold for \$240,917.65. The superintendent of documents is the only government official allowed by law to receive money for documents. If remittances should be sent to any other official, the money must be returned to the sender.

In general, the policy for securing

government publications may be stated like this: Try first the issuing office; then the members of Congress; and finally purchase from the superintendent of documents.

The prices charged by the government are far below cost, as type composition is not figured in the sales price. It includes only paper and labor.

In pushing the sale of government publications, the documents office issues a series of "Price Lists," which are catalogs of documents in stock. Sixty-nine (69) of these lists have been prepared. Many are devoted to agricultural subjects, as "Farmers' Bulletins," "Plants," "Roads," "Soils and Fertilizers," and "Foods and Cooking." These lists are sent to any one free of charge and while they merely represent titles available for sale, yet they are really excellent bibliographs of the literature and topics covered.

For the actual handling of sales, the purchase of coupons is best, twenty for a dollar. The government will not accept postage stamps, foreign money, defaced or smooth coins. If coupons are not purchased, remittances may be made by postal money order, express order, or New York draft.

Another group of agricultural publications is that issued by the experiment stations. These include annual reports, bulletins, circulars, research bulletins and other series by various names. This national system of experiment stations came into existence with the passage of the Hatch Act, March 2, 1887, although a number of states had organized stations previously. In the law creating these stations, it is expressly stated that a certain number of publications must be issued. So from 1887 to date, there have appeared annually hundreds of documents from

(Continued on page 448)

## THE BUSINESS SIDE OF FARMING

By C. R. ARNOLD.

LOOK about over the farm for a few minutes some day while the horses are finishing their meal and ask yourself a few questions such as you would enjoy asking a neighbor, or a manufacturer to find out just how much you really know about the business end of the occupation which you are following. Do your cows pay for the feed, labor and other expenses which are created by them throughout the year? Do your livestock return a reasonable profit above the expense of the feed they consume? Have you too many or not enough horses or farm implements and how about the amount of land farmed relative to the most efficient use of the available labor? These times of expensive labor, high cost of feed, increased rates of interest and increased prices of farm implements make it all the more necessary and, in fact quite essential, that farming be put upon a more firm business basis than that upon which it has stood in the past.

Talk over last year's business with a man who has kept a few single records of his farm operations and you will find that he can tell you with a certain degree of accuracy, just what his farm yielded as a return for his labor and if there is a leak in his business he has every reason to know it. An analysis of the simple farm record kept for a year would reveal new things which had never before come to the mind.

It is not always the person who secures the largest yields that makes the largest profits, although this is quite often the case; but there may be a hole in the business where the profits gradually leak out unnoticed. Did you ever try to soak up an old barrel that has been lying out in the sun for weeks?

The first few gallons of water poured into it will run out of the cracks on all sides nearly as fast as they enter, but by tightening the hoops and applying more water finally you will have it comparatively tight. But the strange part about the whole thing is that as long as you keep it full it will be alright, but let it stand idle for a few days and a complete reorganization of your constructive forces with another application of time and labor is necessary to bring it back to usefulness again.

That is just the way with the farm business. With an uneven balance between equipment and operations; lack of labor saving devices; and lack of convenient arrangements of fields and buildings; the first efforts applied seem to fade away like the water in the dry and sun baked barrel. Neither can this be reorganized and put upon a desirable basis over night. It takes long planning and working out of the plans to get it on a water tight basis. Very well as long as it is kept working and the hoops are kept tight, but let this efficiency slacken and one little leak appear and we soon have an empty barrel which has not only lost all of its contents but must either be reclaimed by the application of additional expense or it will fall to pieces in a condition beyond reorganization.

One of the greatest assets of a successful business man (and every farmer is, or at least should be a business man) is to be able to detect these leaks in the business which are nothing else than a lack of efficiency. I have in mind a farmer who has kept an extra horse for the last three years because he was unable to get a desirable price for her. She has not been worked more than two



dozen days out of the year, yet because of the lack of pasture she has been stabled and fed for a large part of the time. Just take a pencil and figure out what it would cost to feed a horse 25 or 30 bushels of corn and 2 or 3 tons of hay not to say anything about the cost of pasture, care, etc., throughout the year. The idle horse standing in the stable should be considered as a hired man asleep in the hay mow. In this case just mentioned it would have meant dollars in the farmer's pocket if that valuable yet unprofitable horse had died three years ago.

Similar results may be produced for other enterprises on the farm. One cow may be eating up the profit produced by two or three others. Some crop may be yielding a good profit while another may be produced at such a loss that the entire profit is gone. A crop of corn may actually be grown at a loss when the labor, rent of land, etc., are considered but yet this corn might be fed into hogs so that a profit is secured from the crop. At first sight the remedy of a poor system of management would appear simple. If a cow doesn't pay for her feed and other expenses, put her on the market; if corn cannot be grown for a total expense less than

market value; then cut down the acreage. But stop here a minute. This plan appears alright on the surface but let us look a little deeper. If the equipment and labor are at hand to carry a certain number of cows or raise a certain acreage of corn and because of the lack of profitableness this amount is reduced then you can see that an extra charge of equipment, buildings, interest on investment and numerous other items must be charged against the remaining cows or acres of corn so that the entire lot may be put on a losing basis. Estimate what it costs to keep a horse throughout the year and you will readily see that this is a real "leak" in the business and a few such items would make a great difference in the farm profits at the end of the year.

Just as striking an example may be found at the other extreme when a lack of sufficient horse power or equipment may delay the planting or harvesting of a crop a few days, which may be long enough to change it from a profitable to an unprofitable one.

Thousands of simple farm account books are now being kept throughout the state and it is largely through this beginning that a more firm basis will be laid for farming as a business.

## REVIEW OF UNIVERSITY GRANGE

By O. R. KEYSER, Master.

**A**N attempt to give a detailed review of the work of University Grange for this school year will not be made at this time because an account of the work done was given in a recent issue of *THE AGRICULTURAL STUDENT*. We take the liberty in the next few paragraphs, to restate, briefly, what has been done since the opening of the University last September.

Like all other organizations of its

kind the University Grange had been dealt with rather harshly by the abnormal conditions of the war, consequently the activities of the Grange had been running pretty low for some time. After the armistice went into effect it began, gradually, to come back to its own.

In September, 1919, under the leadership of Professor T. D. Phillips of the Department of Rural Economics, a re-



ception meeting was held in the grange hall in the Horticultural and Forestry building. One hundred and twenty agricultural students applied for membership. These candidates were given the four degrees of the order at the next two regular sessions.

A Fifth Degree team was organized and directed by Professor Joel S. Coffey of the Department of Animal Husbandry. The Pomona Degree was conferred by this team at Hilliards, Borrors Cor-

in the state that joined the state organization and as a reward University Grange received a new set of working tools. Our grange won another prize, consisting of a set of new officers' badges' for taking in the largest number of new members during the year.

At the last meeting in the year 1919 practically a whole new corps of officers were elected; Professor T. D. Phillips, who had served as Master for a number of years, had left the University.



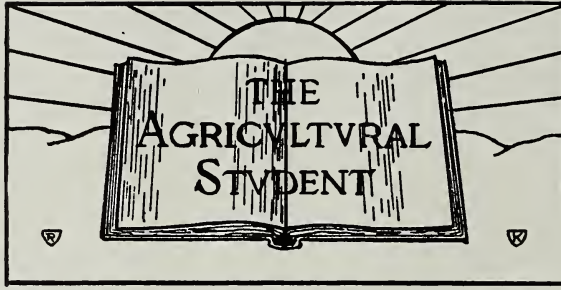
OFFICERS OF THE O. S. U. GRANGE

ners, Perry Clinton Granges and at the session of the State Grange in Memorial Hall in December.

When the State Grange held its annual session in Columbus in December, University Grange gave a reception in the Armory for the members and delegates of the State Grange. Eighty-eight members of the local order received the degrees of Pomona and Flora at the state meeting. This was the largest number from any subordinate grange

Immediately after the opening of the second semester another open meeting and reception was held for the students and faculty of the College of Agriculture. A novel program and a few refreshments had been prepared which resulted in the grange hall being filled to its capacity. This time there were sixty-five new applicants for membership. Two teams had been organized in contest with each other to get new mem-

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Entomology—Philip Lowry, '20.	Soils—C. F. Moses, '22,
	Rural Economics—P. B. Hess, '22.

**THIS VOLUME**

With this issue THE AGRICULTURAL STUDENT completes its twenty-seventh volume. During this time the Student has had varied experiences. Probably the most strenuous trial was during the war. For several issues the faculty published THE STUDENT but commencing with March, 1919, the students again resumed the management. We were confronted with increased costs of publishing and at the same time were trying to bring back the standard held before the war. However, we did not increase our subscription or advertising rates and have done the best we could. We have done the best that circumstances would permit. Possibly we could have done better if we could have had someone who would have acted as an advisor or instructor to us. We realize and know that we made mistakes. We gladly accepted criticisms and tried to remedy them and benefit by them.

However, we worked out an efficient staff and much credit is due them for what success we may claim. The various members have worked faithfully. The funds have been increased and that will mean more money, which will make a better magazine.



The Editor and Business Manager have gained a lot of valuable experience and have enjoyed their work. It is only with a little feeling of regret that we turn the management over to the new staff.

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### THE NEW STAFF

Next year THE AGRICULTURAL STUDENT will be edited by C. V. Kendall, and J. J. Mattus will be business manager. Both of these men are juniors in the College of Agriculture and have had considerable experience on the staff of the Student.

If the petition, as presented by the agricultural students, which will provide for an instructor in Agricultural Journalism is acted upon favorably, THE STUDENT will provide a laboratory for such a course and by so doing the magazine will be definitely helped. With an instructor to act as an advisor and with the above two men in charge THE STUDENT will come through next year in flying colors.

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### THE TAXATION QUESTION

Ohio is face to face with a big taxation problem. Two forces are working with all their mighty influences to bring about a taxation law that is satisfactory to their ends. The intangible interests on one side want intangibles free from taxation and the single taxers would like to have all taxes derived from real estate. The farmer is confronted with this situation. The single tax issue will probably come up before the voters this fall. The Farm Bureau, Grange and other organizations will have to carry this fight for the farmer. Defeating such an issue does not win the fight but the farmers want to elect a legislature that will provide a just taxation law for Ohio. Mr. Dyer in this issue, discusses taxation as he sees it. Turn back and read this article and decide for yourself what is a just law. Then talk and use your influence in that direction. Let us all get together and give Ohio a taxation law that will do justice to Ohio and her farmers.

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### POLICIES VS. POLITICS

In the approaching campaign for the presidential chair, party lines may largely be swept away. Of course old issues like tariff for revenue only, alliance with none, states rights and fealty to the Monroe Doctrine may apparently live and prosper. However, did you ever notice in the study of History that remarkable characteristic of mankind in its ability in times of stress? Washington, Lincoln and Roosevelt are typical in America. Each of these men were the choice of the masses.

Today another crisis is at hand. Another such man is needed as any of the above. Undoubtedly this man is at present on some party platform. How are we then to know this man? Will it be a mere guess? One National farm organization has demanded that each candidate state their views on certain agricultural issues. How this will turn out we nor they do not know. In one thing only we can feel assurance. That is, as of old, some latent law or instinct shall operate to guide the people in their subconscious tests of qualifications for the man of the hour.



# THE CAMPUS ECHO

O. R. KEYSER, Editor.

## BEAUTIFYING THE CAMPUS

An extended effort is being made this spring toward beautifying the campus. Already six or seven hundred trees have been planted in various suitable spots. The semi-circular region from the Ohio Union, Physics building and Page Hall down along High street to the Eleventh avenue diamond is to be the greatest wooded place on the campus in the future. It now resembles a forest of toothpicks. The trees are from the forestry nursery and are of three kinds, maple, elm and ash.

According to the plans of the University architect, the hollow and Mirror Lake are to receive the greatest share of attention this summer. This nook of nature's treasures is to be restored from its present neglected condition. An effort will also be made to have city water at the spring making it fit for drinking purposes.

Just how Mirror Lake will look remains to be seen next fall but it is at least going to be remodeled, reshaped and made deeper with a corner taken off here and something added there. The students are awakening to these efforts of beautifying their campus and are co-operating by resenting any despoliations and welcoming the improvement of Mirror Lake and vicinity. G. J. S.

## GREENHOUSE INSPECTION TRIP

On Wednesday evening, May 5th, the class in greenhouse construction took its annual inspection trip thru Ohio.

The class in charge of Professor L. M. Montgomery, went first to Barber-

ton and visited the famous Barber greenhouse at Anna Dean Farm. Here were noted some of the largest single houses in the state, being 82x800 feet. From Barberton the party went to Cleveland and studied the great greenhouse sections, namely: Shaaff road district where the Cuyahoga Greenhouse Co., M. L. Ruetnik, H. H. Richardson and M. F. Cutting are located.

Then the Rocky River section was visited and the plants of Lorain Greenhouse Co., Zeiger Bros., Goldwood Greenhouse Co. and Gasser Floral Co. were studied. From Cleveland the party proceeded to Ashtabula where Griswald Greenhouse Co., Fank Lucas and Dunbar and Hopkins were visited. The last named firm being the oldest greenhouse establishment in the state (but have now grown to wonderful size). From Ashtabula the party went to Toledo and visited the sections of the very largest greenhouses. Those of Searles Bros., having 9 acres under glass, Wrigley Bros., have  $7\frac{1}{2}$  acres, Miller Bros. with  $6\frac{1}{2}$  acres and Meyer Bros. Crops are reported to be in excellent condition at all places and after a very successful trip the party returned to Columbus Saturday, May 8, after the 3 day trip.

## HORTICULTURAL ANNUAL

Work on the first Annual of the Horticultural society is well under way, with Alvin Barr as editor and Howard J. Reutenik as business manager. With these men at the helm the Annual promises to be a success in every way. Activ-

ities of the society is Apple Show, Chrysanthemum Show and work of Junior American Pomological Society will be featured. These together with cuts showing activities, a short history of each faculty member, and general department news should make an interesting Annual. The present students and alumni will be solicited for subscriptions as well as any friends of the Hort department who are interested in its activities.

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### HORT. PICNIC

The Hort picnic was one of the successful events of the spring semester. Something was needed to keep up interest during the second semester, and a picnic was suggested and proved to be a wonderful success. The place was Glen Mary Park, just north of Columbus; time Saturday evening, May 15. About 40 persons attended, arriving at 5 o'clock. Shortly after, the feed was prepared, consisting of roasted wieners, buns, doughnuts and coffee; for dessert all toasted marshmallows. After the supper games were played, and as time on a warm night in May soon passes, we all turned cityward after the most successful event of the year.

C. E. G.

### REMOVE THE MANURE PILE

Dean Vivian says that he cannot get anyone to go out riding with him because he always cries when he sees a manure pile which might be producing a field of golden corn. He certainly has a different feeling from many students that have been sent out on a hot day of July to haul manure on the hay ladders and spread it with a broken dung fork.

—H. W.H.

Some fellers are like hens, fer their allus gittin' credit fer somethin' they couldn't git out o' doin'.

### FARM CROPS

Mr. John E. Overpeck, who will receive his masters degree this June, has been offered a position with the Farm Crops Department of the University of Wyoming. Mr. Overpeck was graduated from Purdue before coming here to continue his specialization in farm crops work.

The farm crops department has received a small sample of the now widely advertised annual white sweet clover discovered at Iowa Agricultural College. The clover makes a much larger growth the first season than the common biennial sweet clover and should make a wonderful crop to sow in wheat or other small grain to be plowed under the following spring. A large number of samples were sent out to farmers all over the country and if it shows itself to be as well adapted as is now thought, annual sweet clover will certainly become one of the standbys of the grain farmer. Here in Ohio we should keep our eyes upon the results of the tests of this new plant and be ready to work it into our system of farming if it really is such a desirable crop.

H. L. G.

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### PROFESSOR PLUMB RESIGNS

Professor Charles S. Plumb has resigned as head of the Department of Animal Husbandry at Ohio State University. He will remain as Professor in the Department. He wished to be relieved of the administrative work which has grown so heavy as to interfere with his research work.

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### ANNUAL SHEEP

#### SHEARING CONTEST

Samuel A. Porter, Ag-3, of Malta, representing Morgan county, won the grand sweepstakes at the annual sheep-shearing contest held in the Judging Pavilion, with a total of 295 points. In

recognition of his score he was presented with a silver cup offered by the Zenner Disinfectant Company to the student winning the most points in the contest.

The score cards used in awarding the prizes in the several events of the contest based the judgments on quality of shearing, 25 percent; number of cuts, 20 percent; handling of sheep, 15 percent; speed in work, 15 percent; handling of shears, 5 percent; tying of fleece, 20 percent.

*Delaware Man is Winner.*

Wendel Beebe of Delaware won the event for professionals in the use of power machine, with a total of 93 points. Mr. Beebe laid the wool off the animal and cared for the fleece in 3 minutes and 15 seconds, being an expert in the work and an experienced handler of shears, holding a record of 2 minutes and 57 seconds. The second prize of \$3 was awarded to S. A. Long, while F. W. Tussing won \$2 as third prize and P. E. Elliott a one-year subscription to the American Sheep Breeder as fourth prize.

William B. Herbert, Ag-2, won the hand machine shearing event with 154 points; Samuel A. Porter, second; Verle C. Decker, third, and Harry B. Rowlands, fourth. Although Porter was first in speed, Herbert was ahead in handling the shears and in the quality of work. George A. Shaw of Marengo, was the winner in the second event of professionals with hand shears, having 173 points to his credit. F. E. Beebe, second; E. Wilcox, third, and J. G. Holloway, fourth, were the other results.

*Wins With Hand Shears.*

The hand-shearing event and the hand-machine one, both open to students, were won by Harry B. Rowland

and Verle C. Decker, respectively, Mr. Rowland winning the silver trophy cup and Mr. Decker a prize of \$3.

Judges for the affair were Lee Palmer of Pataskala, a member of the board of agriculture, and S. M. Cleaver of Delaware, secretary of the American Delaine-Merino Association as well as a well-known breeder.

### LEAVE IT TO THE COWS

There are some students who go thru the University and the world knows nothing about them. They make no record for themselves. On the other hand there are cows who make records that are published far and wide. Such is the case of the Ohio Colantha Bakker a Holstein-Friesian cow in the University herd. "No. 7" as she is better known has produced an average of six gallons per day. She produced at least 40 pounds of milk per day during a period of three months when she was badly crippled with contracted tendons. Her best record is 19,396 pounds of milk and 837 pounds of butter in one year. Since March 1, 1912, she has produced more than 100,000 pounds of milk and 4,310 pounds of butter. The daily ration of "No. 7" consists of 35 to 40 pounds of corn silage, 12 pounds of hay and 1 pound of grain for every 3 pounds of milk.

If the men of the world would be as persistent in their production as this old cow, society would cease to suffer from the effect of strikes.

—H. W. H.

John C. McNutt, '07, who is head of the Animal Husbandry Department at the Massachusetts Agricultural College, was on the campus Easter week. He was on his way to Iowa and Chicago to look up horses for eastern farms.

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## WHAT THE SENIORS WILL DO

By G. W. TIMMONS, '22.

When the class of 1920 gathers together for the last time within the fold of Alma Mater to receive their reward for the years of toil and loyalty, some eighty-six of these graduates will be of particular interest to us of the College of Agriculture. These are our Seniors and we wish them Godspeed and recommend them most heartily to them with whom they may deal, both in pleasure and business.

It goes without mention that we are deeply interested in what our school-mates intend to do when they have passed on into business life.

George A. Dustman will enter into Smith-Hughes instruction work, not having definitely decided as to where he will locate.

John K. Graham will return, after graduation, to his home farm at Adams Mills, where he has been located since completing his work here in February.

Willis R. George will enter into the farming business on his home farm near Newcomerstown.

Harold E. Walton will return to his home town of Twinsburg to resume farming.

Gilbert M. Boehm will assume the position of head buttermaker in a creamery at Woodfield.

Bernard M. Durbin will take up Smith-Hughes work with no definite location in view.

Lawrence M. Fenner is intending to work in connection with the Government Bureau of Plant Industry.

Harold A. Rose will operate his home farm at North Eaton.

Russel L. Sunderland will take up Smith-Hughes work.

Howard J. Rutenik will enter into partnership with his father, who is a

prominent market gardner of Cleveland.

Thomas R. Brownlee has been doing Smith-Hughes teaching at Van Buren since the first of the year and will continue there after graduation.

Horace M. Kidd has been with the Delco Light Co. since the completion of his work in February.

David S. Weaver will take post graduate work here during the summer.

Warren H. McVey will take up farming at Highland.

Virgil L. Beaber will farm near New Philadelphia.

George W. Krietler will take up professional Agricultural Engineering.

Frank M. Long, having completed his work here at the mid-year, now holds a position as dairy chemist with the Akron Beverage and Cold Storage company.

Lewis S. Pence will resume his work with the Springfield Dairy Products Co. at Xenia after returning to receive his degree in June.

Frank E. Todd will take up entomological work altho he has not definitely decided where to locate.

Clarence L. Rowland is county agent of Columbia county, located at Lisbon. He will return for graduation exercises.

Bertrand Otting is planning to take up practical dairying.

Thomas C. Wiley will do Smith-Hughes teaching.

Edward A. Silver will return to his home in Scotland to spend the summer visiting among his people. He will return later to the States to take up work in Agricultural Engineering.

Benjamin Druckermon, altho undecided as to what to do, will probably accept an offer to teach biology.

(Continued on page 458)

# Home Economics Department

## HOME ECONOMICS AT OHIO STATE UNIVERSITY

College degrees are becoming so numerous among both men and women of today that the accompanying prestige of a degree is not so great as it used to be. A university degree previously implied a great deal of culture but little of which was capable of practical application. Now when one has become the possessor of such a degree it is assumed as a matter of course that he is prepared to make some application of whatever knowledge he has gained in college. The courses offered in Universities have not altogether lost sight of the cultural in their more practical courses. The effort is being made to so regulate the courses so that when the student receives a degree he has in addition to the letters of the degree, the sound foundation of practical experience in his line of work.

During the busy high school days the girl is more and more away from home and has less experience in house work. Then she perhaps comes to college and takes the Home Economics course, and in summer she is usually allowed a vacation from work of any sort. At any rate she does not assume any large amount of responsibility of the work. Thus, the chances are that when she graduates she has practically no experience whatever in the application of the principles learned. Therefor it has been considered advisable that the girls in Home Economics at Ohio State Uni-

versity, whether freshman, sophomore or upper class, should plan some line of home project work for her summer vacation. If a freshman, she might plan a study, based upon her textiles course, of the family's clothing or the clothing item in the family budget. The sophomore has the opportunity to base her project on some of the family's food problems. The junior would have greater choice being able to base her project upon the sanitary aspect of her home, some dietary studies for the family or a problem in household decoration. She may also have had some elective course in which she would be interested in making a study. At the beginning of the fall term or at some logical time in the course she will be expected to make a definite report of her work.

In registering for work in the Department of Home Economics in any of the four years it is of advantage to consult members of the faculty in regard to courses taken. While the registrar and secretary of the college take care of the details and uphold the formalities of credits and hours of work it is of great benefit to consult also with the department concerning the actual courses. This is especially true in the upper classes when there is a little opportunity for elective work and it is time to consider some line of specialization.

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Daughter—A certain young man sent me these flowers this morning.

Mamma—Don't say "a certain young man," my dear. There is none of 'em certain till you've got 'em.

# HOME ECONOMICS AS A FUTURE VOCATION

By DAISIE C. CUNNINGHAM, '21.

*(Miss Cunningham has made a study of the possibilities along this line and gives some valuable information for the beginner who is in doubt. We are glad to announce that Miss Cunningham is to be the Home Economics Editor for the ensuing year.)*

**H**OME economics has a large and it can be said an almost unlimited future. The increasing connection between home economics and the business world, has opened up for women of training and ability, many positions along commercial and professional lines.

In our great-grandmother's time the home was a small factory. All the articles in the home were made by the fam-

out of the home and into the factory. Now home economics is striving to take care of what is left. There is a question for every one to think about. Would it not be a wise thing to bring back some of the industry into the home?

Today the housewife is turning her attention to making more things in the home. Lace making has been revived



HOME ECONOMICS BUILDING

ily. Flax was raised on the farm which supplied the linen. The sheep raised on the farm produced the wool used. The wool was carded, and spun into yarn and then woven into material for clothing. The soap used was made in the home. The candles for lighting the house were also made there.

With the invention of machinery these industries gradually were taken

to some extent. Women are turning to dressmaking, and are seeking information about the use of patterns. The war helped home industry, because of the demand for articles made in the home. People who were not interested in doing things, became interested in knitting and sewing. The housewife has a desire to make her home just as pretty and nice looking as she possibly



can. So she is using her spare time in making such things as lamp shades, articles made of wicker and various other things to give a more personal touch to her home. If the housewife is to accomplish all these things, she must have some one to seek advice from, and that person is the home economics graduate.

The social worker should be an expert along home economic lines. So that as she comes into contact with the women she may help them solve their problems. The visiting housekeeper advises the mother about the care and the feeding of her family, and other questions she would like to have answered.

During the war the home economic departments were alert and active at the front and at home. We had our dietitians in the hospitals and camps. At the front there were canteen workers doing housekeeping and making things as homelike as possible for the soldiers. Back of the lines the home economic departments of universities and schools were sewing and investigating problems of food conservation, publishing and sending out bulletins to aid the housewife with her domestic problems.

The reader may ask, what has all this to do with the future? People have received a better idea of what home economics is and stands for. It also shows the need of having women trained along these lines.

Let us consider the possibilities and look at the future offered along commercial lines. In factories where so many people are employed, the employer has found it necessary to have a cafeteria where a warm lunch is served. These cafeterias are in charge of the home economics expert.

One of the banks is working out a new problem. This bank has employed a home economic graduate who assists in the making of a budget for the home. She advises people who are thinking of buying a home, how to work out an expenditure budget, so they can have an idea just what their expenses will be. With her assistance they are able to borrow money and buy a home and can better manage the payments on it.

There are openings in hotels for home economics women. They are asking for housekeepers with this training. Some hotels also have a dining room in which home prepared food is served; food cooked as it is at home. This dining room has a home economics expert in charge. There are opportunities along these lines in small hotels and boarding houses.

There is also a future for home economics in the field of journalism. This covers editorial and publicity work for newspapers, magazines and farm papers.

Since there are at present a great many positions for women especially trained in home economics and the field for this work is rapidly developing and expanding, the future for girls who take up this work as a vocation is very promising.

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"If a window cleaner is paid \$7 a day, what does it profit a man to be a college professor?" inquired Bailey.

"Well, it's true that the college professor has to exist on a pittance, but he has the satisfaction of knowing that if he and the window cleaner ever met at a social gathering he could make the window cleaner look foolish by discussing the influence of the Victorian era on contemporaneous literature," answered Applegate.

## WAR TO BE WAGED

### ON CORN BORER

An amendment to the agricultural appropriation bill provides for an appropriation of \$500,000 to combat the spread of the European corn borer. The corn borer has already made its appearance in Massachusetts and other eastern states, and farmers fear that it may reach Ohio. This pest was brought from the old country in shipments of broom corn. The appropriation will enable the secretary of agriculture to provide for the prevention and control of the borer throughout the United States in cooperation with the various states. Ohioans who urged this fund and influenced the Senate to take action against this pest are Secretary Shaw, chief of the state bureau of plant industry; Prof. Herbert Osborn, head of the entomology department of Ohio State University; T. H. Parks, extension entomologist at the University; and H. E. Goddard, experiment station entomologist.

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## NATIONAL SHIP BY TRUCK WEEK SUCCESSFUL

National Ship by Truck—Good Roads Week, observed May 17-22, inclusive, was very successful throughout the country, according to Washington headquarters of the ship and truck bureau.

The plans included motor truck tours lasting through the week and covering virtually every section of the country, according to reports received from sixty-five cities where branch offices have been established. Good roads organizations and associations interested in motor truck transportation formed the nucleus, it is said, of a temporary organization to promote activities during the week. Virtually every rural section of the country from

coast to coast was traversed by caravans of motor trucks during Ship by Truck—Good Roads Week, giving practical demonstrations of the utility of truck transportation and preaching the doctrine of better highways.

Other plans included essays by school children, sermons and the distribution of literature, all designed to arouse interest in a national program of highway construction along lines already advocated by such organizations as the American Automobile Chamber of Commerce, the National Grange, the United States Chamber of Commerce, the National Automobile Chamber of Commerce, the National Association of Motor Truck Sales Managers, and the ship by Truck Bureau.

Endorsements from government officials, Senators, Congressmen and educators have been received.

Governors of various states in some cases issued Ship by Truck—Good Roads Week proclamations.

"We need a broadened policy which will concentrate government funds on national highways releasing state and county funds for use on state and county roads," says Senator Charles E. Townsend, author of the Townsend Good Roads bill, discussing the possibilities of the week. "Nothing could be more valuable," he continues, "than a national discussion of this question such as that proposed during the National Ship by Truck—Good Roads Week."

Professor R. C. Atkeson, Washington representative of the National Grange, says:

"I heartily approve the general idea involved in Ship by Truck Week and the study and attention that will thereby be directed to the problems of highways, transportation and distribution."

## SADDLE AND SIRLOIN CLUB

(Continued from page 426)

only. These events consisted of shearing with hand shears, hand power shears and power shears. Several professional shearers came in for the contest. Great enthusiasm was created among the contestants due to the close competition. Mr. Wendal Beebe gave some speed demonstrations, taking off the fleece in 3.05 minutes. This is not his record as last year he accomplished this feat in 2.57 minutes.

As the horse show has not yet been staged at the time of the writing of this article only the plans can be given. But the Saddle and Sirloin Club is cooperating to their utmost with the Columbus Riding Club. The University is showing twelve to fourteen of their best draft animals in classes created for them. The show is held in the Coliseum on the Ohio State Fair grounds May 29th. Some of the classes aside from the regular jumpers and gaited classes are to be ladies' classes and ladies' novice classes. The pairs class and the musical chairs class are something new and are very interesting.

According to Mr. Booth in a report before the Saddle and Sirloin Club as a representative of the Columbus Riding Club the demand for saddle horses has become so great, that he has never seen an equal to it in any five-year period during his residence here at Columbus.

A large number of new horses are entered for the show. A sum of \$600 to \$800 is being expended to make it a success. This sum is larger than has ever been paid before and is drawing in horses from sections outside of central Ohio. Some of the horses entered were also exhibited at Madison Square Garden.

It is the idea of the club next year to help defray the expenses of the Stock

Judging team to the International. Most of the other colleges help the members of their teams financially and as this team upholds the standing of the whole University it is necessary that the men need not be hampered in their efforts, for financial means, and that the best men will be encouraged to try out for the team.

With the activities of the club increasing and the possibilities of starting work in different fields in the future and the nationalization program carried out, the Saddle and Sirloin Club will present a more and more interesting field to those who are enthusiastic for the promotion of animal husbandry.

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## THIRTY-SEVEN YEARS AND GOING STRONG

(Continued from page 427)

The second semester with J. F. Dowler, president, the good work has been continued. The constitution and by-laws, as amended last semester, have been printed in attractive form, and hereafter a copy will be presented to each new member as he is taken into the society. One of the most important happenings is the stand Townshend Ag has taken regarding a course in Agricultural Journalism. The society as a whole has gone on record as favoring such a course, and a petition to the faculty requesting such an addition to the curriculum has been prepared and circulated by a committee appointed for that purpose.

With such a record behind us we may safely expect Townshend Agricultural Society to continue to become bigger and better each year.

---

R. W. Rodgers, '08, is farming in Hamilton county near Cincinnati.



## FERTILIZER EFFECTIVE IN GROWING CORN CROP

Acid phosphate is one of the most effective fertilizers for increasing the corn crop at a relatively low cost as found by experiments at the Ohio Experiment Station. This fertilizer gives its best results when used with manure and also, on acid soils, after the land has been treated with limestone, at the rate of two tons of ground limestone to the acre.

Some prejudice has been held against acid phosphate because it was believed that this fertilizer would ruin good soil, but experiments have disproved this fact.

When acid phosphate has been applied to land at the rate of 300 pounds per acre, and eight tons of manure applied in addition, the yield of corn at the Ohio Station for the first ten years of the 20-year period was 62 bushels;

for the second ten years it has been 70 bushels, while the unmanured yield has averaged only 36 bushels for the entire period.

Acid phosphate this year costs farmers about \$28 a ton but even at this price it is more economical as a fertilizer than the raw rock phosphate.

R. D. George, '10, is owner and bacteriologist of the Research Veterinary Laboratories, 412 Pennway building,, Indianapolis, Ind. The company manufactures vaccines and bacterins.

Eddie Raymond, '18, lately manager of the swine department of Curles Neck Farms, Richmond, Va., is doing county agent work at Athens, Ohio.

Glen E. Boger, '15, who has been connected with the Nestles Food Co., has resigned the superintendency of the plant at Reedsburg, Wis.



BOOK, CATALOG, MAGAZINE  
and COMMERCIAL PRINTERS  
THEATRICAL STATIONERY  
TYPE AND BLOCK POSTERS

*Cor. Noble and Pearl, Rear Southern Theatre*

## PREMIUMS AT OHIO STATE FAIR

By E. V. WELBORN.

ONE of the greatest missions of the State Fair is the promotion of the pure bred live stock industry, and since the live stock registry associations have been organized wholly for the purpose of promoting their respective breeds, it will readily be seen how great possibilities may be accomplished by the coordination of their efforts.

The members of a record association depend upon the association to boost their business and in most instances funds are available for publicity purposes. An association having but one breed to promote can devote its entire time and influence to that end.

The record associations are appreciating more each year the importance of having a strong representative exhibit of their breed at the leading fairs as no other agency affords the opportunity of getting in touch with so many people. The fair needs the live stock exhibit for the success of its meeting, but since its activity covers the whole live stock field, it can only promote in a general way with the same interest shown all breeds.

Premiums are being increased each year but with the increased cost of fitting and showing, special inducements are necessary to encourage breeders to exhibit.

A successful exhibit of any breed directly benefits the record association more than any other agency, this being true why should the record associations not cooperate with the fair both personally and financially.

A number of associations are grasping the situation and are giving liberally of their funds to boost their breed. Since results are beneficial alike to both fair and record association, it will be the future policy of the Ohio State Fair to help those who help themselves. A

uniform classification will be offered each breed of equal importance and in addition the State Fair will duplicate dollar for dollar the amount any record association may offer up to a certain fixed sum.

This plan is being carried out for the first time this year in the sheep department. More than \$5000 has been added to the regular classification by its adoption. Five hundred dollars was fixed as the limit the fair would duplicate for any association. For instance, the regular classification called \$500. If an association gives \$500, the fair will duplicate that with a like amount, thus making a total offering of \$1500 for that class.

In the past there has been no uniformity in the giving of special premiums. If the plan as adopted works out successfully it is hoped to carry it out in all departments next year. The premiums offered at the Ohio State Fair for the past four years have been as follows:

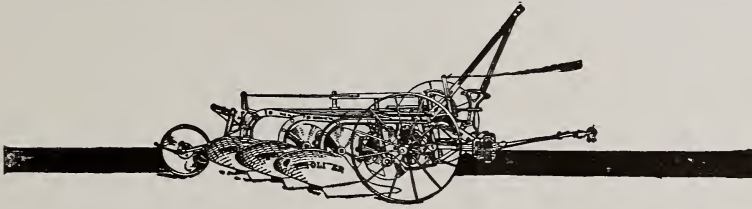
	FAIR	SPECIALS	TOTAL
1917	\$50,506.84	\$4,799.00	\$55,305.00
1918	61,135.84	6,538.66	67,674.50
1919	70,641.00	14,418.50	85,059.50
1920	93,550.00	19,600.50	113,150.50

It will be observed from above statement that great progress is being made in the matter of increased premiums and in the cooperation of various associations as is shown by the amount of specials offered.

The amount of premiums offered by the 1920 Ohio State Fair compares very favorably with those of the largest fairs of our country.

C. A. Mahan, supervisor of county agent work in northwestern Ohio, has resigned to become county agent leader in Kentucky, effective May 1.

## *PLOWMAKERS FOR THE WORLD*



### **QUALITY— The Measure of An Implement Line**

Whether you ask the pioneer who fifty years ago laboriously turned the virgin soil of the prairie, or whether you inquire of the present-day farmer who operates a tractor, you will find each a firm believer in Oliver tools.

Designed at the start for the service that was expected of them, they have been perfected through the years—always keeping pace with the new and varying needs of their users.

Of all the things made by man those only endure which truly serve his need. All Oliver tools are built to serve well and long—that is why Oliver has been a household word to three generations of workers.

## **Oliver Chilled Plow Works**

General Offices, SOUTH BEND, INDIANA, U. S. A.

Works at South Bend, Ind.

Branch House at Columbus, O.

# **OLIVER**



## LIVESTOCK JUDGING CONTESTS

(Continued from page 428)

enthusiasm that they even wanted another contest before school was out this spring. It is only to be hoped that nothing will make it impossible for another contest to be held next year.

I think this feature of the work in animal husbandry, in the Smith-Hughes schools, should become very popular and that it is one of the best things that can be fostered between different schools in near proximity.

## SECURING AGRICULTURAL DOCUMENTS

(Continued from page 430)

the experiment stations. For the fiscal year 1917-1918, 796 publications, aggregating 21,954 pages were issued.

In the distribution of these publications, the Hatch Act requires that they be sent to all newspapers in the state, and to individuals engaged in farming. Mailing lists are maintained by all the stations. The Ohio Experiment Station at Wooster reports 66,000 names on its mailing list, while the total of all lists of all the stations numbers 1,030,105 addresses. Ohioans will have little trouble in making arrangements to secure the current bulletins from Wooster, but requests to other states for mailing list privileges, should be limited to absolute needs. However, individual requests for single bulletins are generally honored by all stations, as long as the supply lasts.

Users of experiment station literature should receive monthly from the States Relations Service the "List of Station Publications Received by the Office of Experiment Stations." This is a record of all the titles issued by the stations and presents a national view of their publishing activities. Upon receiving this record, one can glance

over it, see if any bulletin is desired for personal use, and mail a request for it to the station direct. The United States department of agriculture does not distribute any of these titles. In addition, most of the states issue from time to time a list of their publications available for distribution. Such lists are furnished individuals upon application.

The agricultural extension movement has also been productive of a large quantity of agricultural literature. Many extension divisions were organized prior to the passage of the Smith-Lever Act, May 8, 1914, but this legislation created a national system with federal subsidy. One provision of this law limits the amount to be spent for printing and distributing publications to not more than 5 per cent of the amount appropriated. However, this meant \$221,076 for the fiscal year 1918-1919.

The extension divisions are prolific in their publications and issue a great variety of titles, such as annual reports, bulletins, circulars, weekly press letters, demonstration reports, home economics series, library leaflets, and regular periodicals of various titles. The latest statistics available show an annual issue of 1,472 publications, aggregating 13,153 pages of reading matter.

The extension publications are primarily prepared for the service maintained for each state and individuals have the privilege of being placed on mailing lists to receive them. Some of the divisions have issued lists of their publications still available for distribution. If any one should not care to get all the publications, or even a single series, the divisions will distribute single desired titles upon request.

The unified source of information

# Does An Agricultural Education Pay ?

A recent survey of 1067 Ohio farms shows

Farm operator with high school education or less has average labor income of.....	\$502
Farm operator with a colleg education but other than agricultural has average labor income of....	\$644
Farm operator attending an agricultural college has average labor income of.....	\$1422

## **If You Expect to Farm Can You Afford Not to Attend the College of Agriculture?**

There is a strong demand for men scientifically trained in  
the fields of

**AGRICULTURAL CHEMISTRY  
AGRICULTURAL ENGINEERING  
ANIMAL HUSBANDRY  
DAIRYING  
APPLIED ENTOMOLOGY  
FARM CROPS  
HORTICULTURE  
PLANT PATHOLOGY  
RURAL ECONOMICS  
SOILS**

either as teachers or in commercial positions. Courses in all  
of these lines are offered by the College of Agriculture, Ohio  
State University, Columbus, Ohio.

**Write to the Dean of the College of  
Agriculture for further information.**

concerning the extension publications is supplied by the States Relations Service. Monthly it issues the "List of Extension Publications of the State Agricultural Colleges Received by the States Relations Service." This record includes all the various issues of all the divisions. Applications for any title desired must be made to the station direct, as none of the publications are distributed by the United States department of agriculture.

The extent of this paper does not permit more than a mention of the publications of the state departments of agriculture, the bureaus of entomology, the dairy and food commissioners and other agricultural agencies supported by state funds. Publications of various kinds are issued by these state authorities, each describing and including activities outside the United States department of agriculture, the agricultural experiment stations and the agricultural extension divisions. For one following this field of literature, the "Monthly List of State Publications," issued by the Library of Congress is the most suitable current index. The arrangement is by states, subdivided by state offices. The subscription price is fifty cents a year, payable to the superintendent of documents. By checking this index each month, few important state agricultural documents will be missed.

In conclusion, it may be said that by following the methods outlined above, any person may secure for his personal use, the most practical publications on agricultural subjects and within a short time, he can have available a library of document literature that will equal, if not surpass, much of the data contained in text books and periodical literature.

## O. S. U. GRANGE

(Continued from page 433)

bers. The losing team did the work in furnishing the banquet for the whole grange after the completion of the fourth degree. The next regular meeting the losing team gave a very enjoyable program consisting of vocal and instrumental music and a skit entitled Dr. Cureall.

During the remainder of the year good lively programs full of fun and entertainment were given. At the last meeting plans were formulated for starting the grange work off at a lively pace next year. Four captains will be selected and they will divide the grange into four teams for the purpose of arranging competitive programs. So we anticipate some real "live wire" work for the next school year. Our present membership numbers only 323 but by December 1st, 1920, we are going to have over 500. We ought to have the largest grange in the state and we will have it.

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## EXTENSION MAN IN MARKETING

Z. B. Wallin, formerly Professor of Rural Economics in Utah Agricultural College and State Agent of Marketing in Utah, assumed his duties here on May 1 as extension man in marketing.

---

"What attracted you to your bride?" ask the judge, after the ceremony.

"Well, sah," replied the ebony-hued bridegroom, "de fust time I seed Dinah here she kinder tuk my eye. She was such a likely lookin' woman an' so handy wid herself, but when I learnt dat she was doin' a steady washin' fur seven families, sah, right den an' dar I surrendered." — *Birmingham Age-Herald*.





C. K. SEIBERT, President  
I. D. SEIBERT, P. & Gen'l Mgr.  
G. H. WOODROW, Sec'y & Treas.

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### Cut Flowers, Plants and Corsages

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## Why Get Married?

When you can buy good, home-  
cooked foods at reasonable  
prices at the

## IDEAL RESTAURANT

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## BECAUSE

you have joined the "Old Clothes Club" does not mean that  
you must go like a hobo. Take your old Clothes and Shoes  
to the

## Community Shoe Repair and Tailor Shop

Sixteenth Ave. and High Street

and have them REBUILT and they will look like new. Clothes  
Cleaned, Pressed, Repaired and Remodeled. Shoes Repaired.  
Rubber Heels while you wait.

Expert Tailors and Shoemakers

Phone 11217

## IMPORTANCE AND RESULTS OF THE HOME PROJECT

By M. L. JORDAN.

*(Mr. Jordan is the instructor of the agricultural department of the Bloomville, Ohio, High School.)*

WE learn to do by doing. This statement is just as true as the first time it was spoken. It is possible to commit in a sort of mechanical way many things to memory. It is possible to be well educated in mathematics, yet we have come to feel more and more that real education begins when we begin putting into practice the things that we feel we can and ought to do. For example a boy may know perfectly well the mathematical calculation for a balanced ration, but it will never mean very much to him unless he has the opportunity of feeding that balanced ration to poultry or live stock and afterwards noting the results.

Before going further it might be well to briefly give a definition for the term "Home Project." A home project, is a thing to be done which requires a certain amount of materials, equipment in the way of farm machinery, tools, or live stock, and time plus educational process. Just as a boy or girl in the study of physics and chemistry does a certain amount of laboratory work in order to verify and impress upon their minds facts set forth in their texts, so should the pupil in the study of agriculture do his laboratory work on the home farm.

It seems that the home project has a three-fold importance, first as we have already suggested it gives the opportunity to connect up his work at school with actual practical experience on the farm. Second, it gives the teacher a point of combat with the boy which could scarcely be secured in any other way. Third, it gives the teacher

an opportunity to become acquainted with the parent and home condition of the boy, which is also a very important factor.

Just a word in reference to the above mentioned points. In regard to the teacher becoming better acquainted with the pupils it is quite evidence that a couple of visits to the home can be made of mutual benefit to both teacher and pupil. If the teacher uses tact in his conversation with the boy and his father concerning the project it is often possible for him to lead them to think of new ideas in connection with the home project of the boy. This can often be done very successfully by simply asking questions. We all realize that it is neither our business nor proper to dictate the course that the boy should pursue, but on the other hand we should never allow an opportunity to slip to sow seed that may be of decided importance to the boy and also to the father. For example, if on a visit to a project you find that the boy is feeding his pig a ration composed largely of corn and water, then it might be possible especially in the case where the father is not entirely in sympathy with the work, to ask questions similar to the following: Did he ever try using tankage as a feed for pigs? If he had seen certain neighbors' pigs that were making rapid gain at a low cost on a ration composed of corn, tankage, middlings and milk, or whatever the ration might happen to be.

Last but not least, is the inspiration the boys gain from the project which needs no explanation here.

*CLUB PINS for Boys' & Girls' AGRICULTURAL CLUBS*

**B**

**BASCOM BROS.**

1585 North High Street

COLUMBUS, OHIO

## **Doubly Welcome**

you are when you come with a box of our toothsome candies. Every woman's heart melts at the sight of luscious sweets, such as we sell. Step in today and get a pound or two-pound package as a special gift for her. Select your own assortment if you like.

**HENNICK'S**

AT THE GATE OF THE CAMPUS

***TWO STORES*** Near the Campus

Selling Everything for Your Better Appearance in

**MEN'S WEAR AND HATS**

COLLEGE JEWELRY, PILLOWS and PENNANTS

The ***MENSWEAR*** Shop **ELEVENTH AND HIGH  
SIXTEENTH AND HIGH**

**THE COLLEGE BOOK STORE**

F. C. LONG, Ohio State '03, Prop.

**Ohio State View Book \$1**

In Colors, \$2 and \$3 (Prepaid)

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**Complete Stock of Agricultural Text  
and Reference Books**

OPPOSITE THE UNIVERSITY ENTRANCE



## THE BABY CHICK INDUSTRY OF OHIO

By FREEMAN S. JACOBY, Prof. of Poultry Husbandry, O. S. U.

*(The history, breadth and possibilities of this seemingly new industry is herein dealt with and some valuable tips are given to those interested in poultry.)*

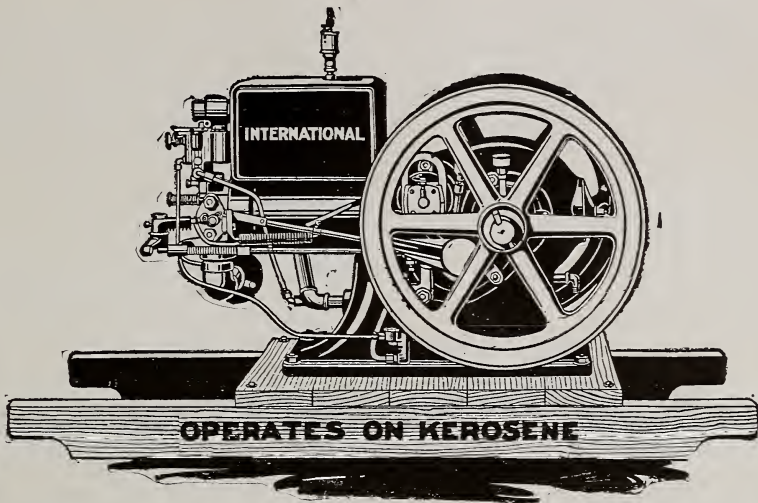
TO a great many folks the title of this short article may appear somewhat ambiguous, for the average person would not be inclined to connect a small downy baby chick just out of the shell with the word "industry." However, the fact remains that the chick has become an article of commerce and every year millions of day-old chicks travel thru the United States mails to their destination. During the past twenty-five years Ohio has taken a leading part in the development of this industry. Even today more chicks are hatched and shipped from Ohio hatcheries than from any other state. The first successful hatchery as well as the largest are both located in Ohio, the former at New Washington and the latter at Cleveland.

The early development of the chick hatchery took place almost entirely in Crawford county in the vicinity of New Washington. To Michael Uhl belongs the credit for constructing and operating successfully the first large incubators capable of hatching several thousand eggs at one time. Previous to that time several parties had constructed large numbers of small machines and operated them successfully in a commercial way but the development of the mammoth incubator paved the way for the expansion of the business in a safe and practical manner. It was not long until the incubator manufacturers saw the trend of development and began manufacturing the mammoth machines for the market. During the past ten years these machines have been perfected to such an extent that they are even more practical and efficient than the standard oil heated incubators.

There are two common types of mammoth incubators in use today, the sectional, single tray compartments, and the multiple tray compartments with circulating hot air. A brief description of these two systems may be of interest.

The sectional single tray compartment machine consists of a number of sections arranged in a row with a hot water stove at one end. The stove is connected to a series of pipes running the length of the machine, usually consisting of four hot pipes and four return pipes. The sections are divided longitudinally so that each compartment has four pipes in the upper part of the incubator which furnish the necessary heat for the eggs located below them. Cross partitions divide the sections again so that each section contains four compartments, each compartment holding 150 eggs. Directly under the pipes are the egg trays and under these are the nursery trays and still lower are the water pans. In the top of each compartment is a flue covered with a tin disc which is connected to a thermometer. Thus each compartment may be operated independently of every other compartment. The common supply of heat, namely, the water in the pipes, is maintained at a uniform temperature by an expansion tank which automatically opens and closes the drafts on the stove. As hard coal is used exclusively the temperature of the water is very uniform.

The eggs are put in the machines at the rate of one third capacity each week. This provides a constant supply of chicks every week and after the third week, the machine is never empty until the end of the season. Usually chicks



## Little Brothers of Titan Tractors

While Titan and International tractors (known to every farmer) have been blanketing the country with field and belt-power, International small engines have been working in all corners of the land.

**International Kerosene Engines** are annually doing millions of hours of work: Annually taking the menial, toilsome, every-day farm jobs—pumping, sawing, separator-turning, washing, grinding, shelling, etc.—off the lame shoulders of grateful men, women and children the nation over: Annually adding to the service that makes farm leisure possible and farm life more than ever worth while.

International quality in general and **International Kerosene Engine** quality in particular are everywhere admitted and admired. Among the engine sizes—1½, 3, 6 and 10 h. p.—is the correct size for every farm. Sold by International dealers everywhere.

**INTERNATIONAL HARVESTER COMPANY**

CHICAGO      OF AMERICA INC.      U S A

92 Branch Houses in the United States

are hatched on Mondays or Tuesdays as these days are most convenient for shipping while the last days of the week are devoted to getting the eggs ready to set.

Starting the third day of incubation the eggs must be turned two or three times a day until the 18th day. Here is where the large incubator has the advantage over the small one. The trays are so arranged with rollers or a sliding device that the eggs in the entire machine can be turned by means of a crank located at one end of the machine. The saving in labor with this means of turning the eggs is enormous in a plant having a large capacity. From the sixth to the eighteenth day the eggs are cooled once a day by leaving the trays half way out of the machine. On the eighteenth day the compartments are closed until the chicks are thru hatching. As soon as the chicks are dry they are put into chick boxes with a bed of wood wool and sent to their destination via parcel post.

The second type of incubator is an Ohio product manufactured at Springfield. It consists of a large cabinet resembling a butcher's refrigerator. In the center is a series of hot water pipes arranged vertically. These are heated by an oil or gas burner. Above these pipes are several electric fans which drives the air down thru the heated pipes to the floor of the machine. Then this heated air circulates up thru the egg trays which are arranged one above the other, nine high. Thus every week three trays of eggs are added at the top, moving them down successively until the 18th day when the eggs are put on the hatching trays and permitted to remain there until the chicks are dry. The eggs are turned by means of a hinged rack that holds the trays at an angle. With a single movement all the eggs in one tier are turned. The

eggs are not cooled in the machine, the temperature being maintained at 100 degrees. The success of this type of incubator would be dependent upon a steady and uniform supply of electric current. However, both types of incubators are being used commercially and are giving satisfactory results.

The demand for baby chicks has shown a steady increase every year. In the first place there is always a market for thousands of chicks in every city, town and village. Second the farmers facing constantly diminishing supply of labor finds that it is economy to discard the small incubator and buy the chicks at the hatchery in one lot. The development of the coal burning brooder stove enables him to rear the chicks with as little labor as when he cared for a dozen small lots under hens or in lamp brooders. Every year more and more farmers buy their chicks and hatch none at all. Undoubtedly the farmer is better off financially as well as otherwise, for the hens will lay more eggs per year and the pullets will develop more uniformly and start laying earlier than if raised in the old fashioned way. Furthermore the hatchery that is abreast of the times is constantly improving the flocks from which they secure the eggs and improvement is assured from year to year.

There is no reason to believe that the chick hatchery is a popular fad. It is economically sound and will play as important a part in the development of the poultry industry as the creamery has in the development of the dairy industry.

---

In the Department of Agricultural Engineering some students who ran economy tests on one of the tractors obtained better efficiency than the manufacturers did.



# Lehman's Cleaning Service

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EXPERT, SKILLED EMPLOYEES

We Insure Your Garments While With Us. MORE SERVICE

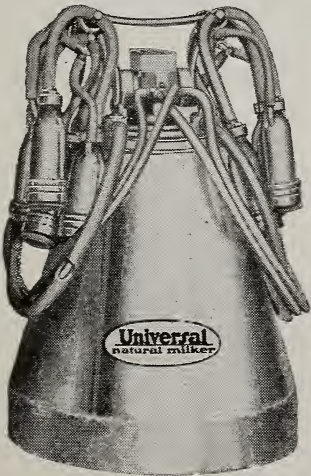
Office: TWELFTH AVE. AND HIGH

Plant: Opp. Olentangy Park.

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## When You Graduate and Begin Your Career As a Farmer



Resolve to cut your milk production cost, not only its dollar cost for labor, but that greater cost—in hours.

### **Universal** **natural milker**

Whether you have six cows or six hundred, the UNIVERSAL will cut your milking time two-thirds.

We want you to see this better machine, with its alternating suction, and massage on two teats at a time. It will mean better dairying for you.

Come to our factory and get the facts about this famous machine. We will gladly explain all its features.

**The UNIVERSAL MILKING MACHINE Co.**

200 WEST MOUND STREET

COLUMBUS, OHIO

## WHAT THE SENIORS WILL DO

(Continued from page 439)

George E. Evans, upon completing his father's farm at Kingston, New Hampshire. He will continue there after his graduation.

Arthur D. Swingle will enter business with his father on their vegetable farm south of Columbus.

Melby W. Brady has been connected with Boys and Girls Club work at Lancaster since completing his work in February.

Phillip R. Lowry will return here to take his master degree next year.

Lee M. Prickett will go to Alabama to assist on his father's farm there.

Thomas C. Kennard will enter Smith-Hughes instruction work with no definite location in view.

Carl R. Arnold has been connected with the Farm Management Department here as demonstrator since February.

Willis S. Mozier will assume the position of advertising manager of the Hydraulic Press Manufacturing Co. at Mt. Gilead.

Alvin W. Barr will return to his home near Amanda, Fairfield county, where he will have charge of several orchards.

George B. Arthur, who is present business manager of the Student, will probably enter into commercial advertising.

George F. Henning, present editor in chief of the Student, will return to his home farm near Hicksville, where he will engage in extensive hog raising.

John L. Hirsch intends to return home to his father's farm near Chilli-cothe for the summer. He is contemplating returning here to work for his master's degree.

Earle L. Johnson, since completing school in February, has been managing Pinery Farms at Painesville.

Donald C. Drake is contemplating accepting an offer to teach Animal Husbandry in Porto Rico.

Samuel S. Studebaker will return to operate his father's farm near Tippecanoe City.

Kofoed M. Allen will return to take up the management of his orchard near Kinsman.

Harold L. Hedrick will enter the employ of Elwood and Frye Landscape architects. The company is located in Columbus.

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## GRASS SEED MIXTURES

### MAY MISLEAD FARMERS

Samples of grass seeds tested at the Ohio Experiment Station show that farmers may be misled through the statement of seed dealers in regard to mixed seeds.

As an illustration, a sample labeled, "mixed alsike and timothy" contained 80 per cent timothy, 10 per cent alsike and 10 per cent impurities. Ordinarily when alsike and timothy are sown in a mixture there should be approximately 50 per cent of each seed.

Another sample, marked "mixed red clover and timothy" showed 91 per cent timothy and 5 per cent red clover with 4 per cent impurities. White sweet clover (hulled) showed 55 per cent good seed, 27 per cent shriveled and the remainder impurities.

The companies advertising such seeds, however, are not licensed in Ohio, where a pure seed law protects farmers from unscrupulous dealers; the prices of the seeds are generally low enough to indicate that not much expensive seed is used in the mixture.

---

Mr. and Mrs. John F. Wuichet (Ruth M. Pierce), both of the class of '08, and their two children make their home in Upper Arlington.

FOR GOOD THINGS TO EAT

—GO TO—

# MARZETTI'S RESTAURANTS

TENTH AVE. AND HIGH ST.

Seating capacity of Table service 300  
Separate Ladies' Dining Room

59 EAST GAY STREET

Seating capacity of  
Table Service 125

HOME MADE PIES, PASTRIES, ETC.  
CHICKEN, STEAKS, CHOPS,  
SPAGHETTI, RAVIOLI, POLPETTE, ETC.

We Serve Only the Best.

Special Dinners .... Lunches .... Plate Dinners

Our Tea Room Now Open for Parties at Any Time.

## Dairy Science

When the Agricultural Colleges entered the field of Dairy Husbandry they turned the light of science upon this industrial field with the result that better methods of manufacture and high grade products are made possible.

Among these better methods none appear to be more important or more necessary than sanitary cleanliness, if good results are to be obtained, and the use of

Indian in  
circle



in every  
package.

**Wyandotte**  
Dairyman's  
Cleaner and Cleanser

is recommended by the Agricultural Colleges of the United States and Canada, because the fresh, wholesome, sanitary cleanliness this cleaner provides is not only an adequate protection to the dairy from insanitation, but is also proving most efficient and economical. Order from your supply house. It cleans clean.

The J. B. Ford Co., Sole Mnfrs.

Wyandotte, Mich.



## A COURSE IN FARM POWER

By O. R. KEYSER, '22.

**T**HESE are days of highly specialized machinery. Every branch of industry has adapted and devolved special machinery and power. The greatest of all industries, Agriculture, too, is awake and alert to the needs of specialized machinery and other forms of power besides horse, man, and women power. And the presence of the proper mechanical farm equipment is becoming more and more evident on every modern farm. In fact a modern farm is not modern if it lacks the up-to-date mechanical and power equipment.

The advent of modern farm power and machinery brings with it the necessity of a practical acquaintance and working knowledge on the part of the present day farmer. He must know the basic principles of operations if he is to use his machine efficiently; if he is to do the same or a great amount of work with a smaller number of helpers.

Besides the operation of power machinery, there are other mechanical problems that confront the farmer. For instance, in making repairs, soldering may be necessary; a pipe line may need to be changed or a new one added; may be a belt must be spliced or re-laced.

Now if we farmers are not proficient to successfully meet these problems they

will be a source of a large increase in our expense account and, consequently, materially cut down our already small profits. The writer knows, from twelve years experience in farm mechanics, that "experience is a dear teacher" and sometimes instruction comes slow at the best. Students of Agriculture who have an opportunity to study these problems in farm power under the instruction and guidance of a man, who has the years of practical experience as well as the technical knowledge, are fortunate indeed.

Professor G. W. McCuen, of the Department of Agricultural Engineering, has developed a course that covers its field in Farm Power very satisfactorily. Professor McCuen is a very competent instructor in farm power. He has spent eighteen years in operating threshing and other farm power machinery besides his technical preparation.

In the beginning of the farm power course the fundamental exercises of soldering, pipe fitting, and the bab-biting of bearings are taken up in the laboratory. And in the class room the principles and fundamentals of the gas engine are studied. The comparative studies in starting the different types of the engines with different loads.

Fuel economy tests are run by the

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STATE AND HIGH STREETS

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The Largest, Finest and Best Equipped Gallery in America.  
Special Rates to All O. S. U. Students.

# STATE Holstein Sale

STATE FAIR GROUNDS

June 9, 1920

2:00 O'CLOCK P. M.

The Ohio Board of Administration, having control of Ohio State Institution farms where fine herds of registered Holsteins are maintained, will sell at public auction on above date thirty high-class registered Holstein bulls. This is a select lot of young herd headers from the great young sires mentioned below and from high-producing cows. These young bulls are owned by the State of Ohio and the public is invited to attend this sale.

Some of the great young sires—

**KING HENGERVELD MODEL FAYNE 66374**

Sire—King Fayne Segis.

**PRINCE PONTIAC DE KOL KORNDYKE 118885**

Sire—Pontiac Korndyke.

**KING SADIE VEEMAN HENGERVELD 173243**

Sire—King Korndyke Sadie Vale.

**FINDERNE HOLINGEN FAYNE KORNDYKE 164269**

Sire—King Pontiac Segis Korndyke.

Dam—Finderne Holingen Fayne.

1395 lbs. butter as a 3 yr. old.

For further information address

AGRICULTURAL DEPARTMENT,  
THE OHIO BOARD OF ADMINISTRATION,

Columbus, Ohio.

students and they are given practice work of properly adjusting the carburetors to get the maximum power from the engines with the least fuel expense. Under Engine Timing, instruction in practical farm methods for the timing of the valves and ignition is given. A comparative study of different tractors and a detailed study of the motors is an attractive feature, also, the practice in traction and belt work.

Steam traction engines are also given careful consideration. The operation and testing of the steam engines are studied and practice given in traction and belt work.

The course also includes a comparative and detailed study of the different types of wind mills.

It is important that every farmer should know something of the operation of a grain thresher and so the students are given opportunity to investigate and study the different makes of threshers and separators.

The equipment used in the laboratory for the exercises of the course are ten small gasoline and kerosene engines, ten tractors, two steam traction engines, two grain threshers, and four distinct types of wind mills.

## CARE OF FARM MACHINERY

By CHAS. H. SPRAGUE, '19.

**W**ITH the opening up of spring work considerable time should be spent on the implements to see that they are in proper shape to stand the strain of spring work. If they were greased and housed properly when last used, they will demand very little attention this spring. Many farmers are careful to house their implements over winter, but during the summer months they show great respect to the protecting ability of an old apple tree. Especially in the case of a tractor is careful housing important as a much larger investment is represented than is true with the smaller implements. In purchasing a tractor, a most important factor to keep in mind is the degree to which the working parts and motor of the engine is enclosed or protected from the elements. This is important as an occasion will always arise when the tractor will be running in the rain and less trouble will be encountered where all parts are well protected.

There are two factors which, if carefully followed, will greatly prolong the

life of any tool or machine—grease and shelter, and the length of life of any machine is proportional to the care which it receives.

The average farm implement is used about seven to twenty days during the year. The rest of the year it is not being used and if standing idle in a field or under a tree will cause it to rest, decay and to deteriorate much more rapidly than actual wear. It seems at one time some farmer made a discovery—a labor saving discovery which was never patented and hence many farmers swiped the idea from him. The idea was that if you leave the plow and harrow alongside the wheat field when you finish with it, it will be right there handy next spring. Think of all the trips to and from the barn saved and in the meantime painted with a beautiful coat of red—free of charge. Farmers took advantage of this labor saving idea to a much greater extent a decade ago than is true now, as present prices of implements do not encourage breakage and short life.



# MOLINE

## The Universal Tractor



**T**HE Moline Universal Tractor makes possible a real system of Power Farming instead of tractor plus horse farming. It does not reverse the old-established order of farming. It does not add expense—but cuts it.

It places the power of nine big horses where the horses stood. It is operated in the same manner as horses—from the seat of the implement. And it does all the field work that horses do, including cultivation of row crops.

It adds more power and speed to an old principle. And if this principle isn't correct, then farming has always been done backward, and you would be operating your implements

from the horse's back instead of from the seat of the implement. Saddles instead of seats would have been in general use.

This is the reason for the great success of the Moline Tractor. It is built on the correct principle. One man with one tractor does all field work from plowing to harvest.

Moline Power Farmers are increasing production and decreasing the cost of production.

The Moline System of Power Farming offers a particularly helpful solution of the farm labor problem.

You will find the Moline Universal Tractor a sure, safe, satisfactory and highly profitable investment.

### MOLINE PLOW COMPANY, Moline, Illinois

*Branches at Atlanta, New Orleans, Dallas, Oklahoma City, St. Louis, Poughkeepsie, N. Y., Baltimore, Los Angeles, Stockton, Cal., Spokane, Portland, Salt Lake City, Denver, Kansas City, Omaha, Minneapolis, Minn., N. D., Sioux Falls, S. D., Des Moines, Bloomington, Ill., Indianapolis, Columbus, Ohio, Jackson, Mich., Memphis, Tenn.*



Please mention THE AGRICULTURAL STUDENT when writing advertisers.

The depreciation of well-housed machinery is about 10% a year; some people place it anywhere from 3 to 12% depending on the type or kind of machine. The depreciation on unhoused machinery will run anywhere from twice to three times this amount or about 25%. Thus the elements have absorbed 15% of the value of the machine. And in the case of the tractor or other high priced implement, this becomes a factor that should not be overlooked by any farmer.

A good machine shed would save at least 10% on the implements which it houses and where a tractor is owned, this means paying for the shed in a few years. At the end of the season when preparing for storage, a list of repair parts needed and a note of the season's difficulties with that machine should be noted and small repairs ordered in anticipation of the future.

Another fact to remember is that the Federal Reserve Bank will not take a farmer's note secured by a chattel mortgage on farm machinery through the farmer's bank rediscount. And this is due to the fact that farmers as a whole do not take care of their farm equipment.

---

### **SOYBEAN BY-PRODUCT VALUABLE SWINE FEED**

Soybean oilmeal has been found to be a valuable supplement feed to corn for swine feeding through tests at the Ohio Experiment Station. This oilmeal is a by-product from Southern mills where the oil has been extracted from soybeans for commercial use.

As a supplement to corn soybean oilmeal was found to be more valuable than linseed oilmeal and gives excellent results when fed to pigs on forage in addition to the corn ration. Since these feeds as well as corn are low in ash, salt, ground limestone and ground

rock phosphate were kept before the pigs in the tests at the Ohio Station.

Pigs fed a ration of corn eight parts by weight and soybean oilmeal one part gained more rapidly and required less feed per unit of gain than those fed ground soybeans as a supplement to corn.

Ground soybeans as a supplement to corn were not entirely satisfactory, as when the pigs were given free choice they failed to eat enough to balance the corn. Their lack of palatableness is believed to be due to the oil content of the beans. When the oil is removed this disadvantage is overcome.

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### **LESS MEN ON THE FARMS**

Owing the rapid movement from the farms to other industries, the continued demands for increased wages by farm laborers and the high cost of farm equipment, a reduction in food production is impending, according to a warning just issued by the Department of Agriculture. It is based upon statistics embodied in reports from all sections of the country.

The report shows that the population on 3,775 representative farms in February 1, 1920, had decreased nearly three per cent in one year. In the same time the number of farm laborers, or hired men, had decreased more than seventeen per cent. Using this ratio for the whole state of New York, the number of men and boys leaving farming to enter other industries since February, 1919, is 35,000. The same calculation gives the number of men and boys leaving other industries to enter farming as 11,000, a loss of more than two-thirds of the labor required.

While in other sections farther from industrial centers the farm desertions have not been so acute, the report says



# The ONA Family

## Our Greatest LONG DISTANCE Strain

### THE ONA FAMILY TREE

Ona Clothilde De Kol, 11 years.....	25019.3	1100.61
1. Ona Button De Kol .....	26761.2	1345.55
1. Jolie Ona Pontiac.....	27102.0	1144.00
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2. Ona Clothilde De Kol 2d, 10 yrs...25449.6	1044.45	
1. Ona Clothilde Wayne .....	27091.5	1266.65
1. Ona Pontiac Wayne .....	24516.0	1087.00
2. Meadow Holm Ona Wayne, 2 yrs. ....	17517.1	940.53
2. Queen Mutual Clothilde, 4 yrs. ....	17498.0	808.00
3. Ona Clothilde Pietertje Ormsby, 2½ yrs. ....	20965.0	804.00
3. Meadow Holm Ona Clothilde, 2 yrs. ....	14943.1	735.58
12 head including three 2-year-olds, a 3-year-old, a 4-year-old, a 10- year-old and an 11-year-old, aver- age .....	22335.3	1006.32

**“With One Single Exception Every One of the Twelve That  
Has Been Tested at Full Age Has Made a Record  
of Better Than 1000 Lbs.”—H.- F. World.**

Can you ask for any more than a combination of this strain  
with

# Finderne Pride Fayne

## Meadow-Holm Farm

PETER SMALL, Chesterland, Ohio  
H. B. GOODING, Tiffin, Ohio



WHEN YOU THINK OF  
**FLOWERS**

GIVE US A TRIAL.

WE FURNISH THEM FOR ANY OCCASION.

Our Corsage Bouquets are original and sure to please the Ladies

**F. C. VIERECK**  
**FLORAL SHOP**

150 EAST STATE STREET

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**Prof. Rader's Dancing Calendar**

NEIL AVENUE ACADEMY

Take Neil Ave. Car and get off at Poplar Ave.

647 Neil Ave.—Phones: Citiz. 4431; M. 6189



Summer Beginners' Class, June 8.

Summer Assembly Nights—Monday, Thursday, Saturday.

Afternoon Class Thursdays, 2:30.

Assembly Nights—Mon., Thur., Fri. and Sat.

Tuition for Beginners—Per term of 10 lessons, ladies \$5, gentlemen \$6; juveniles, per term of 12 lessons, \$5; private lessons, 5 for \$6.

Tuition can be paid \$1 a lesson until paid. Private lessons can be had afternoon or evening. We aim to teach you to dance in one term.

OAK STREET ACADEMY—827 Oak St.

Phones—Citiz. 7105; Residence, Citiz. 4431; Main 6189

A strictly private place for club dances, card parties and for classes that organize for special instruction.

the same condition exists, in varying degree.

Farm wages, it is said, will average fourteen per cent higher than they were in 1919. This is based upon another report from New York, which is applicable in some degree to all parts of the country. In 1919 wages were eighty per cent higher than they were at the beginning of the war. This means that experienced farm help will have to be paid \$52 a month and board this year, as against \$45.50 a month last year. For experienced married farm help farmers will have to pay \$86.50. These men will not be boarded, but a house will be furnished for them. The reports indicate a widespread disposition on the part of the farmers to reduce planting so that less men will be required in the cultivation of the crops.—American Industries.

### PEOPLE ON FARMS LIVE THE LONGEST

Life on the farm is the healthiest and safest, according to statistics compiled by the United States bureau of labor showing the average age at death in various occupations. The farmer and farm laborer live longer than other workers. This does not "seem longer," which, it will be remembered, is the point in the old joke concerning the longevity of married folk contrasted with bachelors and spinsters—it is longer, and official research records prove it. Farmers live to the average age of 58.5 years, blacksmiths are given three years less of life, and masons and bricklayers die at an average age of 55. The list tapers down to bookkeepers and office assistants who are given an average life of no more than 36.5 years.

R. R. Thompson, B. S., Ag.-'12, has been appointed extension specialist in agricultural engineering.

## THE UNIVERSITY RESTAURANT

Patronized by **O. S. U. Students**, invites all visitors of the University to have a meal with them. Come.

Special Chicken Dinners on  
Sundays.

**American and  
Italian Dishes**

**CHITTENDEN AVE. and HIGH  
STREET.**

**John Piacentini, Prop.**

## FOR FARM BUTTER OR CHEESE MAKING HANSEN'S Dairy Preparations

**PURE**, concentrated, ready to use, absolutely reliable. Giving uniformly best results in the country's finest creameries and cheese factories.

**For Cheese-Making:** Hansen's Rennet Tablets, Junket Tablets (for Cottage Cheese), Cheese Color Tablets.

**For Butter-Making:** Hansen's Danish Butter Color (4 oz. and 1 oz. bottles), Hansen's Buttermilk Tablets or Lactic Ferment Culture for perfect ripening of cream for butter and milk for cheese and commercial buttermilk.

Sold by drug and dairy stores, or direct by

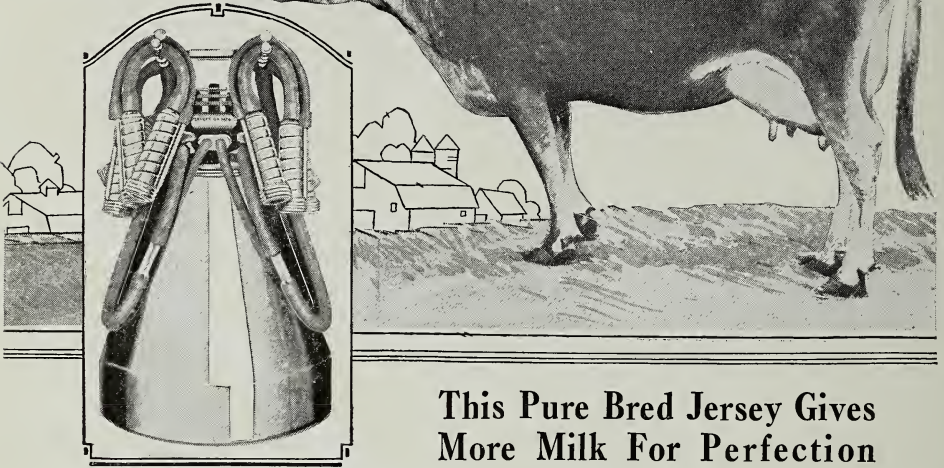
**CHR. HANSEN'S LABORATORY**

Incorporated  
Little Falls, N. Y.

Interesting treatises, "The Story of Cheese,"  
J. D. Frederiksen, free on request.



*Helena of Summit No. 304128,  
owned by Albert Whitehead of  
Pataskala, Ohio. Milked with  
the Perfection.*



## This Pure Bred Jersey Gives More Milk For Perfection

**I**F Helena of Summit, whose picture is shown above, could talk, she would tell you that she likes being milked with the Perfection as well as being milked by her own calf. Her milk records show that she prefers the Perfection to any other method of milking. As a three year old on Register of Merit test she gave 202 pounds of fat in the first four months. Her owner, Albert Whitehead, the well-known Jersey breeder of Pataskala, Ohio, says, "My cows are all in the Register of Merit and are now doing better milked with the Perfection than when milked by hand."

### The Downward Squeeze and Adjustment the Reason

"The longer I use the Perfection Milker the better I like it," says Mr. Whitehead. "It not only enables me to milk the cows in half the time required by hand, but the cows seem to enjoy the action and stand better than when hand milked. The downward squeeze and the adjustments put the Perfection in a class by itself."

Mr. Whitehead is only one of thousands of dairymen who appreciate the nature-like downward squeeze which is exclusive with the Perfection and the simple adjustment which makes it possible to change instantly the suction and squeeze to suit either hard or easy milkers. These two features make the Perfection please the cow and get most milk for the dairyman.

### Ask Us For Names, Addresses and Catalog

Why not investigate the Perfection Milker for yourself and ask Perfection owners what they think of it. We will gladly send you names and addresses of owners, together with a free copy of "What the Dairyman Wants to Know", the book that answers every question about milking machines. Write. Today.

## Perfection Manufacturing Company

2143 E. Hennepin Avenue

Minneapolis, Minn.

*The Perfection is the Milker with the Downward Squeeze Like the Calf.*

# PERFECTION MILKER



**THE CAMPUS ECHO**

(Continued from page 438)

**SCHOOLS FOR RURAL MINISTERS**

The Methodist church will have a school for rural ministers at Baldwin-Wallace College, Berea, Ohio, June 22 to July 9. The Extension Service of the college of agriculture will furnish a speaker for one hour each day during this school. A speaker from the Home Economics Department will speak each day during one week. Director Ramsower, Messrs. Cruickshank, Thomson, Jacoby, Spohn and Lantis will be among the speakers.

There will be a similar school at Defiance College, July 12-24. There will be a speaker from the Extension Service on the program each day. The rural ministers who attend this school and the one at Berea will be told about the work of the Extension Service and College of Agriculture. Then they may make use of the help that is given to any community or organization.

**WHY FARMERS GET RICH**

One of the farm crops enthusiasts advocates the growing of golden corn and silver oats. Probably that is where our city friends got the notion that money grows on bushes for the farmer.

—H. W. H.

**BULLETIN ON APPLE BLOTCH**

"The Control of Apple Blotch" is the name of a 16-page bulletin just issued by the Agricultural College Extension Service, Columbus. It contains a summary of the successful results at last year's demonstrations and information concerning control measures. It may be had without cost on application.

Norwood W. Giles, B. S., Ag-'17, has been appointed extension specialist in vegetable gardening.

**TRACTOR ATHLETICS**

The other day Samuel Porter and Roger Mitchell decided to stage some athletic stunts with the Fordson and Whitney tractors. They locked horns, did a few flips and then gave it up as a bad job.

Slowly but surely machines and conditions are being shaped up to fit the needs of the small farmer. He is soon going to depend upon the small-unit labor-saving machines so that he can do all of his work himself instead of depending upon poor help.

In the west the grain threshing problem has become so serious that manufacturers are beginning to build small threshing outfits for "individual use." The farmer can do his own threshing with his own force of helpers and machine at the time it should be done, instead of waiting for the big outfit.

In the early days of the war the people were implored to "buy a bale of cotton at 10 cents a pound." Now purchasers are scrambling for the product and offering record prices. Some New England cotton mills are declaring dividends of 40 per cent. This helps to explain why our denims are going sky high.

**WHY NOT ROW A BOAT?**

April 22.—The large 70 acre field of the University farm is standing under three to six feet of water. The class in drainage have been assigned a drainage project for the same field but no one wants to carry the chain.

H. W. H.

Thomas B. Foster, '06, is County Agricultural Agent of Highland county at Hillsboro.

# Purina

## Double Development Feeding Schedule

**How to double  
the development  
of chicks  
and prepare them  
for early  
and profitable  
production**

By the proper use of Purina Baby Chick Chow (Chick Feed), Purina Chicken Chowder and Purina Hen Chow (Scratch Feed), you can bring chickens to maturity in much shorter time, with greater vitality and with stronger, better-boned, better-feathered bodies.

### **Purina Double Development Guarantee**

The money paid for Purina Chicken Chowder and Purina Baby Chick Chow (Chick Feed) will be refunded if baby chicks, when fed these two feeds as directed, do not develop twice as fast during the first six weeks as when fed a grain ration only.

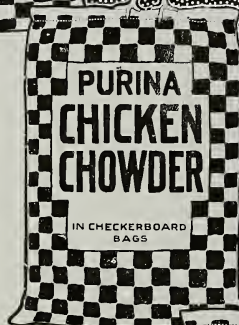
**RALSTON PURINA COMPANY**  
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Ft. Worth, Tex.      Nashville, Tenn.  
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**Sold in Checkerboard Bags Only**



*Suited  
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Every Age*

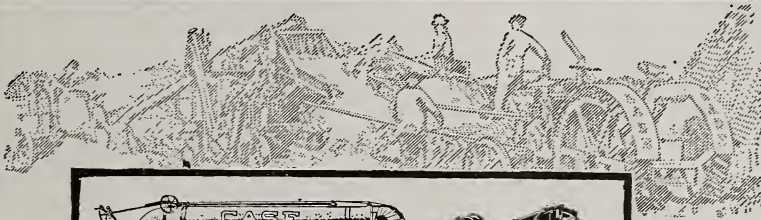


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Sectional View Case Steel Built Thresher



Look for the  
EAGLE  
Our Trade Mark

## Case Threshers Save Your Crop

GOOD threshing is the climax of good farming. It's what you have been working for ever since you began preparing ground for seeding. It's just as important as fertile soil, summer showers and harvest sunshine,—and it's up to you. If you do not own a Case Thresher, the next best thing is to employ one.

The Case Steel Built Thresher, in any of the six sizes we manufacture, is the machine of *clean threshing, thorough separation, perfect cleaning and unequalled saving.*

You owe it to yourself to save all you harvest. You can do it with a Case Machine. It successfully handles Rice, Flax, Peanuts, Peas and Beans, Rye, Oats, Barley, Wheat, Clover and Alfalfa, Millet, Buckwheat, Timothy, Orchard Grass, Kaffir Corn, Sorghum, Broom Grass Speltz, Hungarian Grass, Red Top, Blue Grass, Milo Maize, Sudan Grass and Feterita.

After passing the cylinder, where all the grain is threshed and most of it separated, the straw is shaken,—shaken—shaken;—230 shakes a minute! Note the improved straw-rack, the great separating surface and ample space for straw.

Write for catalog of Case Steel Built Threshers showing sizes suitable for the individual farm or for custom threshing on the largest scale.

**J. I. CASE THRESHING MACHINE CO., Inc.**

Dept. CL-6, Racine, Wis., U. S. A.

*Making Superior Farm Machinery Since 1842*

To avoid confusion, the J. I. CASE THRESHING MACHINE COMPANY desires to have it known that it is not now and never has been interested in, or in any way connected or affiliated with the J. I. Case Plow Works, or the Wal-lis Tractor Company, or the J. I. Case Plow Works Co.

**CASE**  
TRADE MARKS REG. U. S. PAT. OFF. AND IN FOREIGN COUNTRIES.  
**POWER FARMING**  
**MACHINERY**

**NOTE:**  
We want the public to know that our plows and harrows are NOT the Case plows and harrows made by the J. I. Case Plow Works Co.



## NEW COUNTY AGENTS

C. C. Lowe, '17, assistant county agent in Washington county, was appointed county agent in Sandusky county effective January 1st, to fill the vacancy caused by the transfer of E. E. Barnes to become extension specialist in soils at the Ohio State University.

Ralph W. Wells of Montgomery county, a graduate of the Ohio State University, was appointed county agent in Monroe county effective February 1, to fill the vacancy caused by the resignation of Jean Gribble.

Glenn K. Rule, assistant county agent in Van Wert county from September 1 to January 1, has been appointed county agent in that county to fill the vacancy caused by the resignation of Herbert S. Andrew.

M. V. Bailey of the Ohio State University, assistant agent in Clermont county, has been made county agent for Hocking county.

E. R. Raymond, '19, who has been managing the swine department of the Curlesneck Farm at Richmond, Va., was appointed agent in Athens county, effective March 1.

H. S. Lewis, formerly assistant county agent for Delaware and Wood counties, has been appointed agent for the latter.

H. S. Andrew, formerly agent in Van Wert county, was appointed agent in Auglaize county, effective March 1.

Clarence Rowland, Washington county farmer, a graduate of the Ohio State University, was appointed agent in Columbiana county, effective February 15.

E. W. Hawkins, county agent in Ritchie county, West Virginia, was appointed agent in Clark county. Mr. Hawkins is a graduate of the University of Illinois College of Agriculture.

Paul H. Teal, county agent in Berkeley county, West Virginia, was appointed agent in Defiance county, effective April 1. Mr. Teal is a graduate of Purdue University.

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## FROM THE ALUMNI

W. H. Palmer, '05, is head of the department of boys' and girls' club work of Ohio. His office is in Townshend Hall.

Burt B. Miskimen, '08, is a very successful sheep grower near Coshocton. Burt has had many very pleasing offers to take up county agent work but evidently he knows when he has found what he likes to do best.

"Mac" Thomas, oldest county agricultural agent in Ohio from point of service, resigned, effective April 15, to become county agent in Monroe county, Michigan.

E. C. Richey, county agent in Franklin county, resigned, effective April 1, to engage in farming in Noble county. His vacancy has been filled by Dillon Myers, assistant county agent leader in Indiana. Mr. Myers assumes his duties the latter part of April.

Henry W. Vaughan, '08, author of "Types and Market Classes of Livestock," is now professor of animal husbandry at the University of Minnesota.

Earnest Clawson, '08, has charge of the arrangement of the courses of the students in vocational agriculture at Ohio State University.

C. E. Rowland, '20, has accepted the position of county agent in Columbiana county.

E. R. Raymond, '19, has charge of the swine department at Curles Neck Farm, Richmond, Va., and has accepted the position of county agent of Athens county, Ohio.



## A Farmer-Contractor's Experience in Dynamiting Ditches

Mr. J. A. Burt, a farmer and levee contractor of Gunnison, Miss., wrote us for information about blasting ditches. We advised him to order a small amount of dynamite for a trial demonstration. A Hercules Agricultural Service Man then showed him and his help that earth could be removed at a cost of 35c a cubic yard—labor and explosives cost included. The test convinced him of the economy of using

## HERCULES DYNAMITE

Later Mr. Burt wrote us, "I have used Hercules Dynamite in blasting five miles of small farm ditches. These ditches were dug in low, swampy places where we could use neither teams nor shovels. With seven men I could dig a mile of ditch three feet deep and seven feet wide in four days. I find this the most satisfactory and quickest way of ditching, and the cost is very low for such work."

"Progressive Cultivation", a 68-page booklet, will tell you about ditch digging, tree planting, stump and boulder blasting with dynamite. Sign the coupon and mail it today.

In many sections our Agricultural Service Men are showing farmers how to use explosives. Write about this service.



*Hercules Dynamite is sold by leading hardware  
and implement dealers.*



**HERCULES POWDER CO.**

1004 Orange Street, Wilmington, Del.

Gentlemen: Please send me a copy of "Progressive Cultivation." I am interested in dynamite for \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

M. V. Bailey, '17, is county agent of Hocking county, living at Logan.

R. W. Gardner, '19, is county agent of Perry county, and is located at Somerset.

W. F. Gahm, '14, is county agent of Scioto county, with headquarters at Portsmouth.

George L. Schuster, '16-M.'18, has been elected head of the department of agronomy at Delaware.

Miss Loraine Norris, of Columbus, and Frand Todd, '20, of Elyria, were married on February 13, 1920, at Columbus.

E. J. Walters, '19, has accepted a position as instructor in the department of farm crops at the Michigan Agricultural College.

Joseph A. Cross, '17, is connected with the Majonnier Bros., manufacturers of scientific dairy apparatus, Jackson Boulevard, Chicago.

Glenn W. Hays, '13, who is in charge of the meats work at Iowa Agricultural College, has just prepared a bulletin on "The Curing and Preservation of Meats."

M. W. Brady, '20, is connected with the extension department of Ohio State University and is at present acting as county leader of boys and girls club at Zanesville.

Jimmy Marple, '19, recently in charge of the horticultural department of the Boys' Industrial School, Lancaster, Ohio, is now a state nursery inspector, with headquarters at Columbus, Ohio.

A callow young codger named Petie Said "gosh, how I hate a muskeetie!

The nervy old things

Makes pimples and things

On the ankles and neck of my sweetie."

—*Youngstown Telegram.*

## BROSMER'S

1591 North High  
Opp. E. Eleventh Ave.

**HOME - MADE CHOCOLATES,  
BONBONS, ICE CREAMS, ICES  
AND BAKED GOODS FRESH  
EVERY DAY**

We make a specialty of Butter Creams, Bitter-Sweets, French Pastries and Salted Nutmeats made fresh daily.

BOTH PHONES

## Nitrate of Soda

**IN CAR LOTS AT LOWEST  
WHOLESALE PRICE**

Likewise less than car lots for shipment at all times from Columbus, O. Also Nitrapo (15% nitrogen, 15% potash) and all domestic and foreign potash salts. Also manufacturers of

**Arsenate of Lead Powder**

**Arsenate of Lead Paste**

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**Bordo**

**Paris Green, Etc.**

**Muriate of Potash Now Available**

Write us for anything in fertilizer or spray line

**Nitrate Agencies Co.**

408-9 Central Nat'l Bank Bldg.

**COLUMBUS, OHIO.**



# \$735<sup>68</sup> Milk From A Grade Cow in One Year

## Springdale Dairy

JOHN. N. SOUDER  
Prop.

The Quaker Oats Co., *Brunswick, Md.*  
Chicago, U. S. A. Jan. 10, 1920

Gentlemen:—

I want you to know how pleased I am and how I like your SCHUMACHER FEED. I have a grade cow nine years old. In 1917 we began weighing our milk, feeding any kind of feed we could get. This cow did fairly well. In 1918 I was able to get your feed the entire season and this cow produced 2,000 lbs., more milk than the year previous. I fed twice daily 20 lbs. of silage and 10 lbs of SCHUMACHER FEED, also mixed clover hay and corn stover. We were not feeding to make a record of any kind.

Her total yearly yield was 1672 gallons of milk for which we got 44c a gallon. The total being \$735.68. The total cost of the feed was \$225.00 leaving a net return of \$510.68. Naturally, I feel that SCHUMACHER FEED is the best feed a dairy-man can feed.

Yours very truly,

(Signed) J. N. Souder

## Indisputable Evidence

The letter reproduced above so strikingly confirms, by actual experience, the facts we have been telling dairymen and farmers about SCHUMACHER FEED, particularly as a feed for producing MAXIMUM MILK PRODUCTION and keeping cows in "fine fettle" throughout long milking periods, that it needs little additional comment. It tells what was fed—how fed—the cost and the net returns. Bear in mind this was a *grade cow 9 years old* and no special effort was made to make a record. It is INDISPUTABLE evidence that

## SCHUMACHER FEED

is a feed you cannot afford to overlook. Check up your cows—your feed costs and see if they show a big yearly profit. **Start Now**—feed SCHUMACHER FEED—not for a week or a month, but for the entire lactation period of your cows and you will feel as Mr. Souder does, **THAT IT IS "THE BEST FEED A DAIRY-MAN CAN FEED."**

### SCHUMACHER FEED AND BIG "Q" DAIRY RATION

are IDEAL feeds for dairy cows. SCHUMACHER FEED supplies the carbohydrate or maintenance part of the ration and BIG "Q" the protein concentrate portion. Ask your dealer for them. If he cannot supply you, write to us.

## The Quaker Oats Company

Address: Chicago, U. S. A.



## BEAUTIFYING LINCOLN HIGHWAY IN STARK CO.

An association has been formed to beautify the Lincoln Highway through Stark county. In conference with landscape gardening specialists at the Ohio State University, road corners, banks, and grounds near railroad crossings are being surveyed for planting hard maple, oak, elm, and sycamore trees. Some of the work will be done as a memorial to fallen heroes of the late war.

Edgar C. Ritchey, '07, has resigned as County Agent of Franklin county, and has taken up farming on his farm near Senecaville, Noble county.

"Elected your studies yet?"

"Not yet," said the lad in the co-ed school. "I'm going to take history if the tall girl takes it and all studies elected by the dazzling blond."—*Louisville Courier-Journal*.

## FERTILIZER EXPERIMENTS ON THE FERTILITY PLOTS

One of the most pretentious experiments to be attempted on the University fertility plots is one to determine the effect of different types of fertilization on a rotation of the common farm crops of Ohio. This experiment will be started this spring. A very brief description is all that will be attempted at this time.

A rotation of corn, oats, clover, and wheat, will be followed with sweet clover sown in the wheat to be plowed under for the next spring's corn crop.

The fertilizer practice will be based upon the needs of yields of 100 bushels per acre of corn and oats, 50 bushels of wheat, and four tons of clover hay, taken as the ideal to be striven for. From yields and analyses as reported from the Illinois, Pennsylvania, and Ohio stations, it is estimated that there should be applied 1200 pounds of acid

# Net Profit Counts

Every farmer needs this free booklet.

Write today for booklet, "Shipping Profits." Shows how Universal Package saves money, labor, time. Better net profits proven. Valuable data every grower, shipper and receiver should have.

This is the day when the agriculturalist looks at his shipments to market from the standpoint of his net profit. The

## UNIVERSAL PACKAGE

pays the best net profits because it carries, saves time packing, saves labor, carries safely, gets best prices at market. It is uniformly best for all fruits and vegetables. Ask for booklet: "Shipping Profits," showing how.

# The Package Sales Corporation

212 S. Michigan Street

South Bend, - - Indiana





## The Feed That Makes the Milk Yield



**I**F you have not made up your mind as to what is the best feed for large milk production, for either summer conditions or heavy feeding in winter, visit the dairy farmers in the eastern states and see what they feed. These farmers are supplying large markets with milk. Their principal production is dairy products.

Ask them what high-protein feed they are using to make up the main strength of their rations. The answer will invariably be that they are feeding Buffalo Corn Gluten Feed, and, have fed it for a good many years—and in a great many cases, their fathers fed it before them.

**Corn Products Refining Co.**  
New York Chicago

Write to H. J. RORKE, Selling Representative, 904 Swetland Bldg., Cleveland, O.



phosphate, 800 pounds of sulphate of ammonia, and 400 pounds of muriate of potash per rotation. Where manure is used it is taken at the Wooster valuation and eight tons regarded as the equivalent of 500 pounds sulphate of ammonia, 250 pounds acid phosphate, and 200 pounds muriate of potash.

Three groups of experiments, each covering four series of ten plots will be run. The five plans that will be followed are:

1. Apply an amount of acid phosphate somewhat in excess of what would be required, and depend upon the air for nitrogen, and the soil for potash.

2. Apply acid phosphate as above and in addition such amounts of muriate of potash as analyses of the soil and the crop and various experiments show necessary, but still depend upon the air for the nitrogen.

3. Apply acid phosphate and potash

as above, and an amount of nitrogen to supply the need as shown in similar soils.

4. Partial substitution of manure for the fertilizers of 3.

5. Assume the nitrogen and potassium needed to be met by eight tons of manure per acre, and supply the phosphorus as acid phosphate.

Half the fertilizer will be applied to the corn and half to the wheat. All the plots will be limed once per rotation, and then sweet clover will be plowed under, but straw and stover of the other crops will be removed.

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"Experts tell us that roughly speaking, one marriage in three results in divorce," began Mattus with a fund of irritation.

"Yes," Hess chimed in, "and it's the roughly speaking part that caused the trouble."

# The Smith Agricultural Chemical Company

## *Commercial Fertilizers Agricultural Chemicals*

FACTORIES:

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INDIANAPOLIS, IND.



Wheels on a track — the  
Cletrac way — take less power

## The Tractor for Summer Work

You men who go onto the farm this summer for practical experience will find the sturdy Cletrac shouldering the load of summer work.

The hot, horse-killing jobs in hay and harvest fields are speedily finished—the Cletrac working steadily on at the right pace for the job, slower in heavy hay or grain, faster if the crop is light.

It handles the belt work too—lines up quickly and uses the cheapest fuel economically.

Look for the Cletrac on the farms around you this summer. Cletrac owners will vouch for its all-year-'round dependability and great work capacity.

You are probably making a close study of all tractor types now. We will gladly furnish you with interesting and practical material that will give you a line on the all-purpose, tank-type Cletrac.

## The Cleveland Tractor Co.

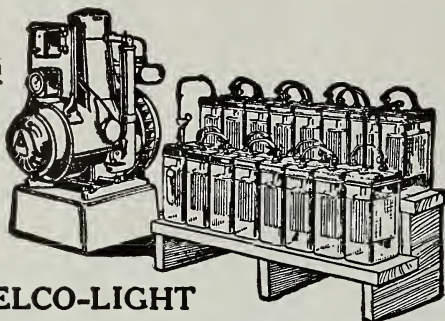
*Largest Producers of Tank-Type Tractors in the World*

19123 Euclid Ave.

Cleveland, Ohio

# DELCO-LIGHT

ELECTRICITY FOR EVERY FARM



DELCO-LIGHT

## "The Best Lighted Farm in the County"

One prominent farmer says:

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"The neighbors speak of it as the best lighted farm in the county—

"But it is more than that—it is the best place in which to live—and to raise a family."

Delco-Light brings city comforts and conveniences and economies to the farm.

It lights the house and barn—it furnishes power to pump the water, wash the clothes, churn the butter, separate the cream—run the vacuum cleaner and the electric fan.

It is so simple that a child can operate it and so economical that it actually pays for itself in time, labor and fuel saved.



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There's a Satisfied User Near You... "Why Experiment?"



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BECAUSE it benefits ANY GOOD CITIZEN—for it gives him helpful hints for the GARDEN and the GROUNDS AROUND HIS HOME.

BECAUSE it benefits HOME—for it contains many practical suggestions in its HOME ECONOMICAL DEPARTMENT for the home.

BECAUSE it benefits the ALUMNAE and 'THOSE INTERESTED IN OHIO STATE UNIVERSITY—for it keeps them in touch with their ALMA MATER and with their OLD FRIENDS and CLASSMATES.

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NAME .....

ADDRESS.....

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Many buyers of cream separators are tempted to save \$10 or \$15 in first cost by buying some "cheaper" machine than a De Laval.

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It should always be remembered that the cream separator saves or wastes in quantity and quality of product, and in time and labor, twice-a-day every day in the year.

Moreover, a De Laval Separator lasts twice as long on the average as other separators. There are De Laval farm separators now 28 years in use.

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